

Routing Slip

Governor's No:

Governor's Due Date:

Document: 15-003882

Document Date: 8/20/2015

Due Date: 8/27/2015 9/18/15

Admin: EHA

Closed:

Subject: Health issues for military families at Kaneohe Marine Base - Request DOH initiate actions to address health issues and to ensure actions include prevention of these exposures.

Author: Walter Chun

Comments:

[illegible]

SCANNED

11546

RECEIVED
DEPARTMENT OF HEALTH

2015 AUG 28 A 9 16

HEER OFFICE

Walter Chun, PhD, CSP, CHSP, CHST

RECEIVED
DEPARTMENT OF HEALTH
28 AUG 17
HEER OFFICE

Personal Matters / Ex. 6

August 20, 2015

State of Hawaii, Department of Health
Dr. Virginia Pressler, MD, Director Dept of Health
1250 Punchbowl St.
Honolulu, Hawaii 96813

RE: Health Issues for Military Families at Kaneohe Marine Base

Dear Dr. Pressler,

This is a followup to previous complaints. Military families residing at the Kaneohe Marine Base housing are exposed to carcinogens and hazardous substances without their knowledge. The residents have shared their health issues among themselves and there is a clear trend of health issues in the various neighborhoods which must be brought to our attention.

These families are not informed of the presence of the carcinogens and hazardous substances in and around their residences. They are frustrated with their unexplained health issues and continue to ask questions. Although military families have filed numerous health complaints with the Hawaii Dept of Health they have not received a response to address their health issues.

The attached package provides an overview of the health problems experienced by the military families. We strongly believe that aggressive and proactive actions must be initiated to address the exposures to the unsuspecting families. Although military families have filed numerous health complaints with the Housing Contractor, the Base Command, the Medical Command, and the Hawaii Dept of Health responses and corrective actions to address their health issues are lacking. It is not clear that the Hawaii Dept of Health has taken any aggressive actions to address these concerns.

At this point we know that the health issues experienced by the military families and the relationship to the presence and handling of the carcinogens and hazardous substances are significant. We request that the Hawaii Dept of Health initiate actions to address these health issues and to ensure actions include the prevention of these exposures. It is our belief that the weight of the denial from the housing contractor and the military is outweighed by the collection of information showing the adverse health effects identified by the military families. The information in the attached package

SCANNED
115461

15-003882

provides information from the families – and it clearly outweighs any denials from those in authority. We need to listen to these families.

Thank You,

A handwritten signature in black ink, appearing to read 'Walter Chun', written in a cursive style.

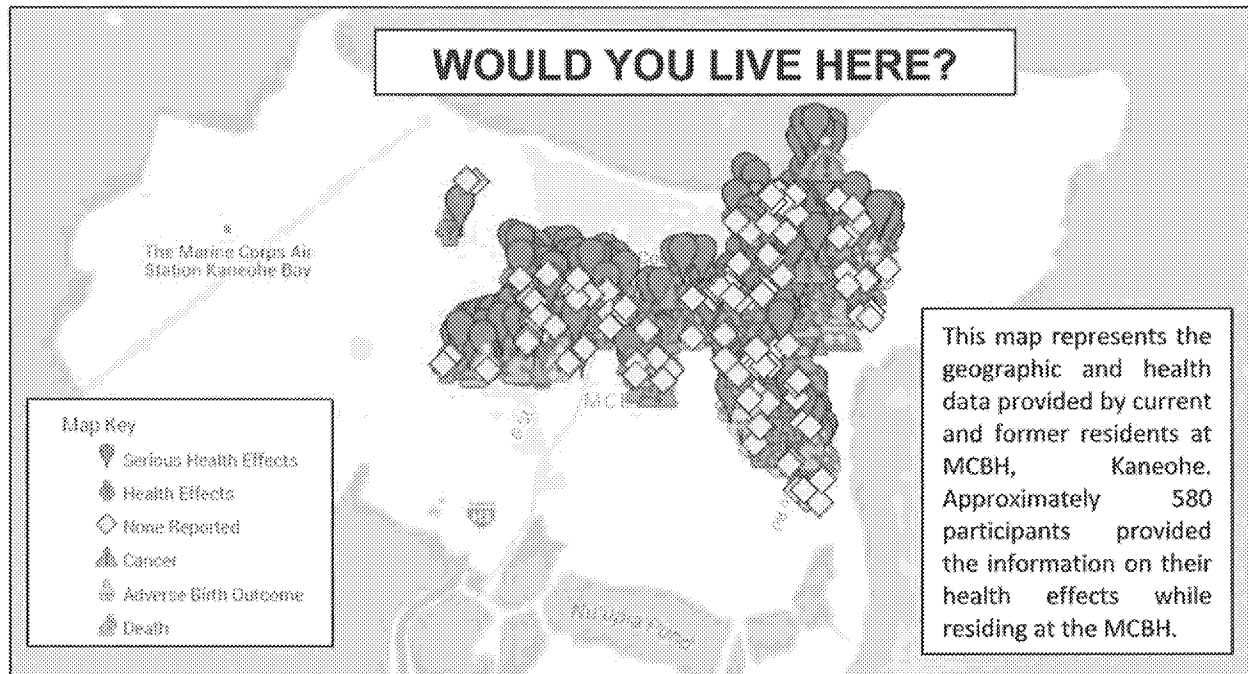
Walter Chun, PhD, CSP, CHSP, CHST

Copy to:

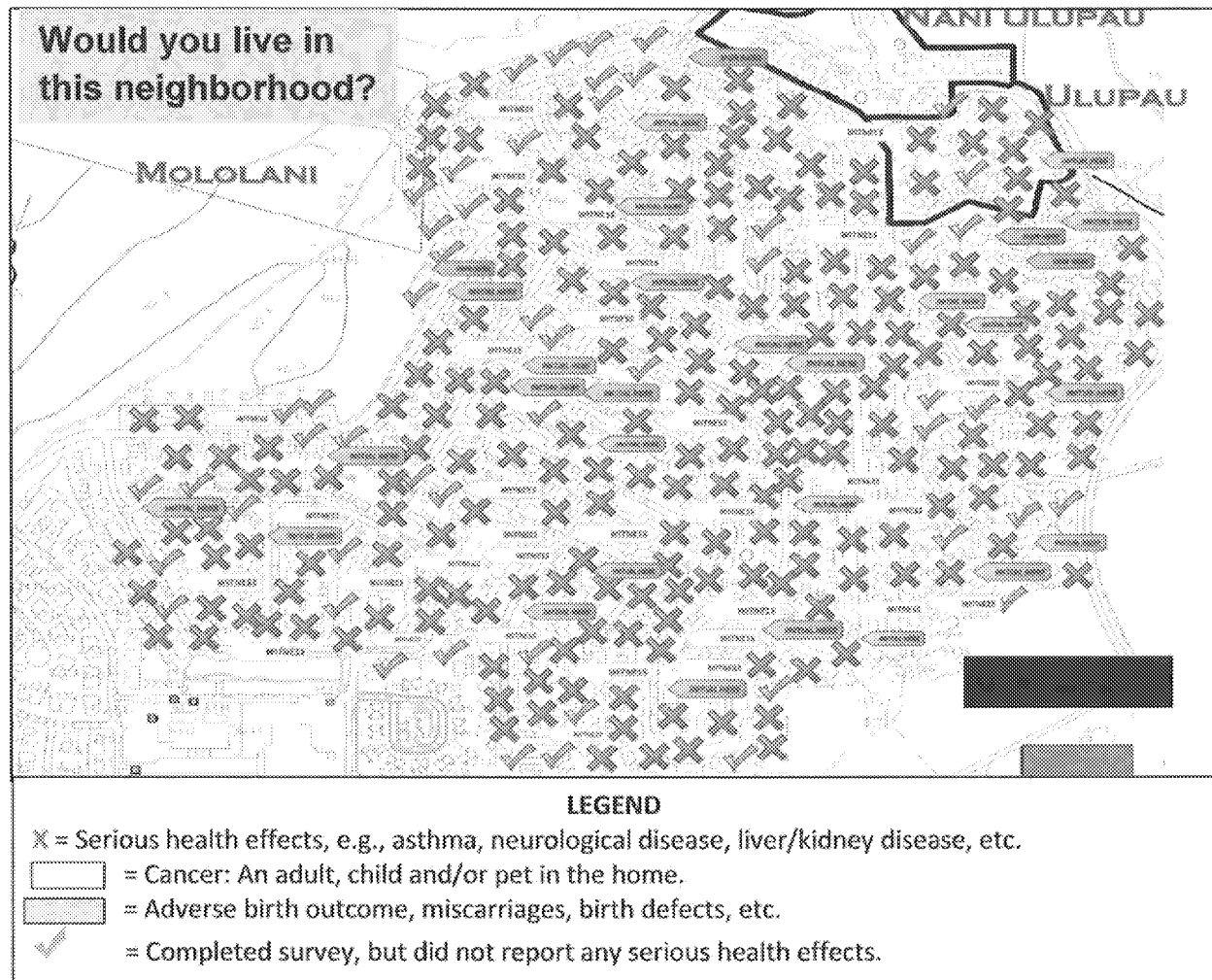
- Governor David Y. Ige
- EPA Regional Enforcement Coordinator
- CDC/National Center for Environmental Health
Centers for Disease Control and Prevention
- Senator Mazie Hirono
- Senator Brian Shatz
- Congresswoman Tulsi Gabbard
- Congressman Mark Takai
- General Joseph F. Dunford, Jr.
Commandant of the Marine Corps
- Commanding Officer Marine Corps Base Hawaii
- Commanding Officer Tripler Army Medical Center
- Navy Environmental Health Center

WE MUST LISTEN TO OUR MILITARY FAMILIES

WOULD YOU LIVE HERE?



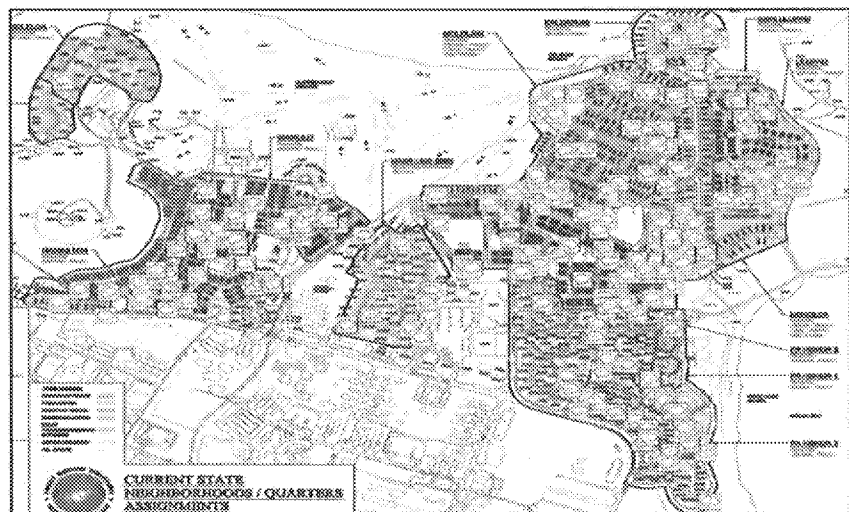
Would you live in this neighborhood?



Military Family Health Issues on Contaminated Lands at Kaneohe Marine Base, Hawaii

We are writing to follow-up with previous correspondence since 2005. Over the last 10 years military families have experienced significant unexplained illnesses at the Kaneohe Marine Base in Hawaii. The construction of military family housing on contaminated lands at Kaneohe Marine Base, Hawaii involved demolition and construction in late 2005 to 2014. After years of residency and exposure to carcinogens and other hazardous substances unsuspecting families experience adverse health effects. The carcinogens and other hazardous substances found in the disturbed soils were disturbed and released, not removed from the site and lacked protective measures to effectively prevent exposures to the residents. The costs to properly handle and dispose of the soils once they were cross contaminated is high. Residents, many of whom lived within a few feet of active, contaminated project sites were never informed of the presence of the hazardous contaminated soils or any safety precautions to protect them from harmful exposures. Military members and their families suffer adverse health effects from exposures to these hazardous substances when the contaminated soils were disturbed and handled. Breathing, ingesting and absorbing the hazardous substances create human exposures. An informal survey of past and present residents at the Kaneohe Marine Base Housing (KMBH) reflects the environmental horror of their lives. See Attachment A for a general overview of the health effects and the geographical locations. Would you live in neighborhoods with a developing history of unexplained, illnesses, cancer, miscarriages, birth defects, etc.? This letter attempts to bring attention to the needs of the military members and their families. **We need to listen and to help now.**

WOULD YOU LIVE IN THESE NEIGHBORHOODS? The yellow callouts below are locations where adverse health effects were experienced by military families. This picture is worth a thousand words.



Past and present military family residents at the KMBH, experience unexplained illnesses. They are frustrated by the medical community who tell them that they cannot determine the cause(s) of their illnesses but they list the causes as "environmental". What does that mean and how will it help treatments for their illnesses? A military family with frequent visits to the emergency room for themselves or their children are plagued with the question – why are we sick?

In 2014 an informal survey revealed high frequency and severity of adverse health effects to the residents, and children while living on KMBH. This survey occurred after learning of the passing of an 8 year old with sudden unexpected and unexplained liver failure. It appears that this family lived in the immediate area of excavation and grading of contaminated soils. The construction of "burial pits" for contaminated soils was also in progress during this family's residency in their neighborhood. The construction of these burial pits included mass movement of thousands of tons of contaminated soils. Attachment A provides an overview of an informal survey of health effects by past and present residents. Military families residing in these neighborhoods are not informed of the increased risk to cancer and non-cancer illnesses.

Active demolition and construction continued in KMBH neighborhoods from 2007 until early 2014, when the last project was completed. Military families were required to reside in homes immediately adjacent to these contaminated unprotected construction sites. The reports from the contractors for these areas provide information that contaminated soils were excavated, graded and transported throughout the occupied neighborhoods. Creating "burial pits" with soils contaminated with carcinogens and hazardous substances were released from these operations causing exposures to the families without their knowledge. The exposures occur when the minute contaminated dust particles are inhaled, ingested and absorbed by the human body. During the periods of these exposures and thereafter these families developed unexplained, disabling diseases and illnesses. Attachment B provides a more detailed example of the proximity of the occupied residents to this kind of exposures. Is there any doubt that living in this neighborhood where the "burial pits" are created would cause adverse health effects?



The contractors made decisions to leave contaminated soils in place and to create "burial pits". How were the decisions to create burial pits made? Who concurred and approved? And most importantly how was it determined to be safe? A burial pit with carcinogens and other hazardous substances creates environmental health hazards when they are created, and they pose long term health hazards for the future. The creation of burial pits of contaminated soils was accomplished without diligent consideration of the adverse health effects to human health. Further using soils with elevated levels of carcinogens and hazardous substances creates an increased risk to cancer and non-cancer illnesses.

These families experience immediate or short term (acute) and long term (chronic) adverse health effects from exposures to carcinogens and other hazardous substances. The carcinogens and other hazardous substances identified by the contractor are chlordane, Aldrin, dieldrin, endrin, heptachlor, heptachlor epoxide, DDD, DDE and DDT. Most of these pesticides are classified carcinogens. The health effects for these chemicals are described in public statements by the Agency for Toxic Substance & Disease Registry (ATSDR) and the International Agency for Research on Cancer (IARC). See a summary of health effects on Attachment C. Specific information on other chemicals or biological hazards that may be present was not provided and we must wonder if there are other health hazards present in these neighborhoods.

The acute and chronic adverse health effects of the exposures are expressed in the residents' complaints. Attachment D includes copies of a few of the complaints the Hawaii Dept of Health (HDOH) received from KMBH residents more than a year ago. To this date no response from HDOH or indication of a pending investigation has been provided. Some of their statements clearly reflect their frustration and suffering:

"These included frequent and unexplained respiratory illnesses, neuropathies, endometrial enlargement. Our dog experience two bouts of severe gastrointestinal bleeding, which resulted in two intensive care stays at the veterinarian. The frequency and severity of these illnesses became exhausting and debilitating and inflicted undue mental duress."

"I, along with ALL of my neighbors that faced the future dog park, suffered from severe allergy symptoms during this time: headaches, congestion, irritated eyes, a general feeling of being "unwell"."

"Knowing the soil was contaminated and our family was deemed disposable BECAUSE of the unique situation the service to our country puts us in, I cannot help the feelings of betrayal of all those who allowed this to happen either by conscious decision or by conscious lack of action. My husband was deployed to the war in Afghanistan while his family was poisoned at home. I would like to know, at any level, how this was and continues to be justified."

"My family lived on MCBH much longer than your "normal" military family who usually stays less than three years. Twelve years total of living under these conditions and thinking that we were "safe" in our homes and around our home and now finding out that many issues were possibly covered up has me wanting questions as to WHY!"

"As you can imagine, I felt betrayed. My family and I have all suffered from various health issues, all of which began when we moved to Hawaii. All that I can ask of you is to consider the possibility that the contaminated soil, with higher than EPA advised levels of chlordane and heptachlor (and other toxins) might have contributed to our family's problems."

"My family alone has been dealt with health issues such as Asthma, Dysphagia, skin conditions, allergies, and Neurological disorders. As a mother of two beautiful children it kills me to know that they were exposed to poisons that we knew nothing about. What is even more disturbing is that it can take years for things like Cancer to develop and yet we were sent from one contaminated base to another so saying that families will only be exposed for a short period is a pathetic and sickening excuse."

"My next door neighbor developed cancer, and my other neighbor had a miscarriage (when we lived there). I think there is a bad pattern emerging."

"It is sad to think that our brave men and women serve our country and get in arms way, not to mention their families but then have to come back home and get poisoned on their own soil by a MULTI-BILLION DOLLAR company."

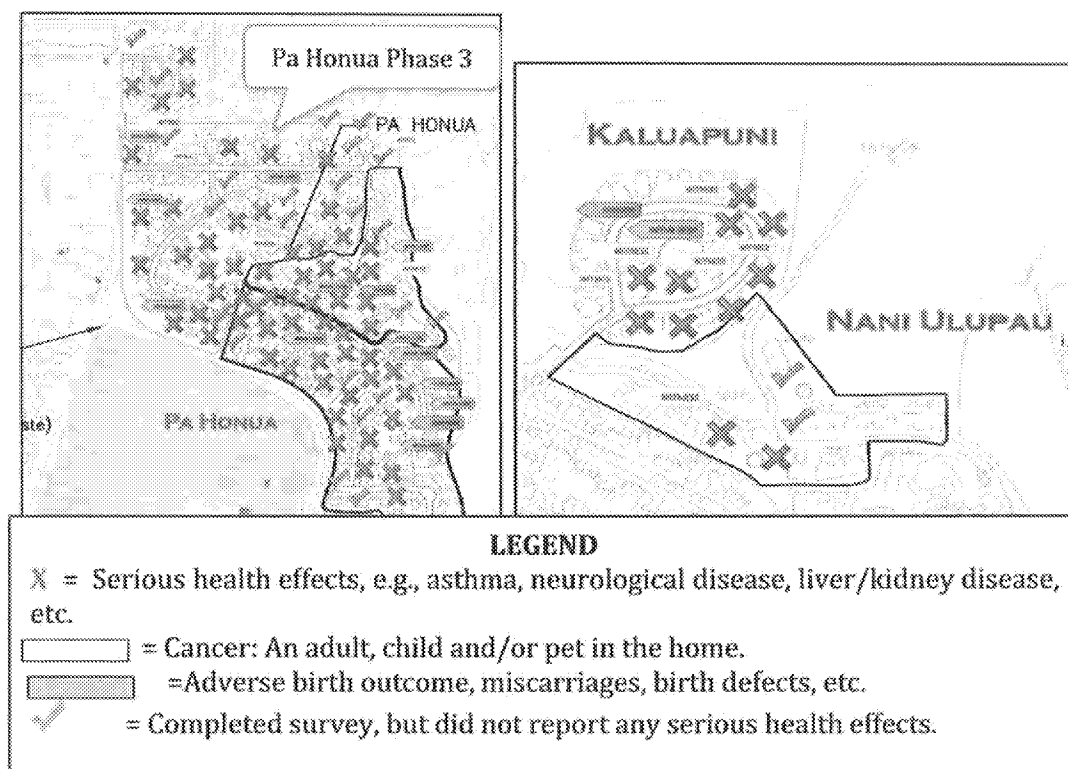
The presence of carcinogens and other hazardous substances in and around the military family housing creates exposure 24 hours a day, 7 days a week. These exposures are created when the very small particles of contaminated soils are inhaled, ingested, and absorbed by the human body. The pathways of exposure consist of inhalation, ingestion and absorption which should have been addressed PRIOR to even considering any activity that will create exposures to these human pathways. The excavation, grading of land, transportation, filling and dumping trucks, and burial of contaminated soils will create exposure to these human pathways. Common examples of the type of health experiences by the military families includes; asthma, and other respiratory illnesses; skin disorders, neurological disorders; cancer experience in adults, children and pets; miscarriages, or serious birth defects; and autism and other similar health effects. Protective measures to prevent these exposures AND the methods to determine the effectiveness of these measures should have been taken and documented.

Various factors will affect the exposures and the impact of the exposures to humans and pets. It was decided by the contractors that the housing would be constructed on contaminated lands where the carcinogens and other hazardous substances are present. The allowance of an increased risk of cancer and non-cancer illnesses was decided without an acceptable human health risk assessment; and without informing the residents. In August 2015 an informal survey was summarized and a map showing the health problems in the neighborhoods is shown in Attachment E. There are two undeniable facts, (1)

the carcinogens and other hazardous substances are present in and around the neighborhoods, including burial pits under the houses; and (2) military families are experiencing unexplained illnesses in and around these neighborhoods.

The contractor and the government joint venture for privatization of military family housing identified the presence of carcinogens and other hazardous substances. A "Pesticide Soil Management Plan" was developed to handle the contaminated soils. This document also rationalized that the exposure of military families to these carcinogens and hazardous substances at a higher risk of cancer and non-cancer illnesses was acceptable.

In addition to the "Pesticide Soil Management Plan" we know that the housing project in the Pa Honua Phase 3 and Kaluapuni areas were constructed with contaminated soils. Around 2005 and 2006 the Navy awarded contracts to private contractors for the demolition of old housing and the construction of new housing. The Pa Honua Phase 3 and Kaluapuni housing was constructed on contaminated lands as directed by the Navy and later accepted by the housing contractor. Attachment F is a map that provides an overview of the health effects experienced by the military families in these neighborhoods.



Many generations have observed unsafe conditions when animals are affected by the environment. The old stories of canaries being sent in to mines to check the oxygen levels for human safety are a good example. The military families continue to experience significant trends in illnesses and deaths of their

pets. The unique baseline for these animals is established when the animals are shipped to Hawaii. Each animal must receive a clean bill of health prior to arriving in Hawaii. It is remarkable that these healthy pets would contract illnesses like tumors, cancer, respiratory distress, skin problems, etc. after a short period in these residences. A family relates their story where they unknowingly lived next to a stockpile of contaminated soils. After a heavy rain their dog drank from the water puddle created by the overflow from the contaminated site in their yard. The dog died the next day. See Attachment G.

WHO KNOWS ABOUT KMBH HEALTH ISSUES?

We attempted to notify and bring these actions to proper authority. Notification from late 2005 to the present continued. Over the past 8 years we filed notices, complaints and letters to a wide group:

- a. Numerous complaints to the State of Hawaii Dept, of Health (HIDOH)
- b. Hot line complaint to EPA
- c. Met with the EPA and HIDOH on April 27, 2006
- d. Issued a press release and interviewed with the Hawaii news media, see Star Bulletin article May 6, 2006.
- e. Navy Inspector General Hotline Complaint
- f. Complaint to the Commanding Officer at KMBH
- g. Congressional Delegation complaints on more than one occasion
- h. Complaint to the Governor's Office
- i. Notification to the Commanding Officer of Tripler Medical Command

SCOPE OF THE MANY ISSUES: The scope of the many issues with the construction of military family housing on contaminated lands is very broad. Some examples are shown below:

- **Synergistic Health Effects:** Health effects from exposures to the carcinogens and hazardous substances are described by the Agency for Toxic Substances & Disease Registry (ATSDR) and the International Agency for Research on Cancer (IARC). Short excerpts on health effects are provided in Attachment C. The varying synergistic adverse health effects involving exposures to multiple carcinogens and hazardous substances are (1) unique to individuals, especially the unborn and children; (2) level of exposures from inhalation, ingestion and absorption will vary; (3) continued exposure as the hazardous substances are tracked from one location to the other created a larger source of contamination; (4) exposure caused by families eating vegetables and products from home gardens; and (5) the lack of awareness and information provided to the medical community of the exposures to carcinogens and hazardous substances for purposes of diagnosis and trending.

- **Burial Pits Under Housing:** It is not safe or prudent to construct homes above burial pits with hazardous substances and contaminated soils. Numerous reports document the fact that soils contaminated with carcinogens and other hazardous substances were buried under the housing. These burial pits contain thousands of tons of contaminated soils. Post construction surveys, sampling or other measures to confirm effective measures to protect human health were never completed or contemplated. Post monitoring measures to ensure the effectiveness of the alleged measures to protect human health from these burial pits were also not taken. Military families reside over burial pits with soils contaminated with carcinogens and other hazardous substances without their knowledge and without any measure of assurance that it is safe. See Attachment H for a map of the burial pits located in residential neighborhoods.
- **Release of Hazardous Substances Exposing Families:** Thousands of tons of contaminated soils from excavation and grading of the construction sites occurred in the immediate vicinity of occupied residences. At least from 2008 through to 2014 military families were exposed to carcinogens and other hazardous substances without their knowledge. Again we note that the contractor does not provide reliable measurements or other information to reflect the effectiveness of their measures to prevent exposures to the military families during this period. Although the environmental laws require the contractors to ensure they contain soil, debris and dust within their project site we know that their alleged attempts were not effective. Thousands of tons of contaminated soils tracked through occupied neighborhoods created a huge cross contamination problem as well as significant exposures to the families. Military families suffered unexplained illnesses throughout this work.
- **No Help from the Medical Community:** Military families are frustrated, confused and they are suffering. They were and are exposed to carcinogens and hazardous substances and no one will listen to them. They continue to seek reliable information and attempt to improve their medical care. Too often they are informed that the military medical community will not test for carcinogens or hazardous substances and they will not listen to the families who bring forth information about their contaminated neighborhoods. The health issues from 2006 to present continued without the military medical community taking any actions. The clear and consistent trend of adverse health issues among normal healthy families can be easily recognized because the military families are treated by a focused medical care system. This trend was not reported to the Center for Disease Control and Prevention (CDC) or the State of Hawaii Dept. of Health by the military medical community. The maps of health issues in the various neighborhoods as shown in the attachments are

obvious and indicate actions are needed to prevent further suffering of these families. The medical commands have not identified the environmental factors that would contribute to more accurate diagnosis, effective treatment and prevention of illnesses for the military families.

- **There are Laws:** There are laws, rules and regulations that are supposed to protect our military families and the general public. Non-compliance with these laws creates the suffering of the military families and as long as no one is held accountable the suffering will continue. Enforcement of the laws and insistence on compliance to protect human health must remain our highest priority. There are laws, rules and regulations that do not allow the construction of housing on contaminated lands. There is no doubt that the pesticides that were released meet the definition of "HAZARDOUS SUBSTANCES" as defined by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). (See Attachment I for discussion and additional definitions from the CERCLA).
 - a. Section 101 of the Act definition states, *"The term 'pollutant or contaminant' shall include, but not be limited to, any element, substance, compound, or mixture, including disease-causing agents, which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring; except that the term 'pollutant or contaminant' shall not include petroleum,..."*
 - b. **Hawaii Revised Statute §128D-10 Knowing releases.** "Any person who knowingly releases a hazardous substance into the environment in an amount above the reportable quantity established in the rules (other than a permitted release pursuant to and in accord with a federal, state, or county permit), shall be subject to prosecution for a class C felony or shall be punished by a civil penalty of not more than \$100,000 per day of violation."
- **Military Families have no voice:** Fear of reprisal and discrimination is a reality. Although there are rules and regulations that prevent any actions against whistleblowers we also know that these rules and regulations are not enforced. We have heard many times of military members being directed or told to stop discussing or participating in any actions regarding military family housing. Keep in mind that military members do not have the freedoms of the public to complain, file lawsuits, etc. As each family leaves the housing and new families enter the contaminated

neighborhoods, who will tell the new families or will these families have to start all over again to find out what makes them sick? It is paramount that listening to the military family members and others be taken seriously. Military members and their families do not have a fair and strong voice due to fear of reprisal.

ACTIONS: We cannot allow the continued human exposure and the failure to address the issues of housing on contaminated lands to exist. We cannot allow the cycle of exposing our military families to toxic and hazardous substances over and over again. A story of exposure to toxic and hazardous substances, suffering and the failure to listen and to address the health issues can be seen in a story provided by the spouse of a military member who resided in military housing at Kaneohe from 1948 to 1950. Generations later we are now seeing a repeat of this cycle. See Attachment J for the email she sent:

"I have a story to tell you about my family and DDT that was used during the time my husband was stationed at Kaneohe in 1948 through 1950. The military furnished housing at Kaneohe, the housing (sp) was called termite village.

My entire family including myself developed tumors and cancer. I had two children, I lost one with cancer, years later I lost my husband from toxic exposure. Mercury and DDT combined, colon cancer, severe nerve damage."

Questions:

- What will it take to hold people accountable for the human suffering?
- What will it take to prevent future exposures and human suffering?
- What will it take to:
 - Protect future residents
 - Help past residents
 - Notify and educate the medical communities
 - Provide military members and their families with medical doctors who will test for substances related to their physical symptoms and provide appropriate treatment
 - Bring attention to the poor practices of allowing such conditions

Actions must be taken and we would expect to see actions taken by independent 3rd parties of professionals aimed at the following:

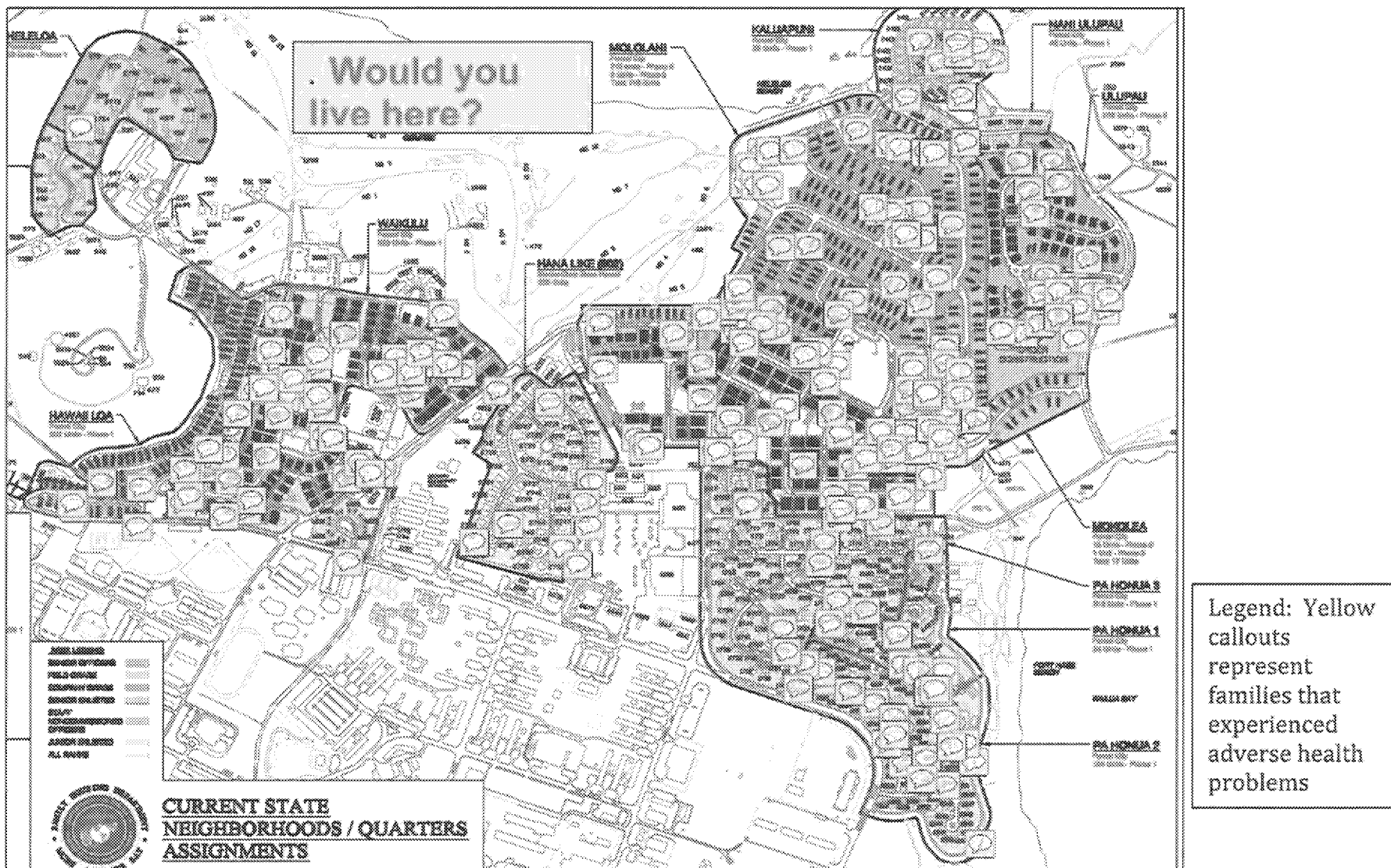
- Cleanup the KMBH to prevent exposures to our military families.
- Enforce the laws, rules and regulations to protect people and the environment in a strict, consistent, and fair manner.
- Conduct an epidemiological study
- Develop a monitoring plan for the neighborhoods to identify exposures
- Monitor the health of the past and present families for the future and ensure detailed documentation for future health problems

- Provide a positive environment and means for military families to make inquiries and submit requests for assistance without fear of reprisal

Attachment A	2014 Map of Neighborhoods and Adverse Health Experience
Attachment B	Example of the Proximity of the Residents to Exposures
Attachment C	The health effects for these chemicals are described in public statements by the Agency for Toxic Substance & Disease Registry (ATSDR) and the International Agency for Research on Cancer (IARC).
Attachment D	Excerpts from Complaints Submitted by Residents to the Hawaii Dept of Health
Attachment E	2015 Overview of Health Issues in Neighborhoods
Attachment F	Map of Pa Honua and Kaluapuni Health Effects
Attachment G	Family Member Story of Pet's Death
Attachment H	Map of Burial Pits for Contaminated Soils
Attachment I	Excerpts from the Comprehensive Environmental Response, Compensation, and Liability Act of 1980
Attachment J	Dorothy Reed Email

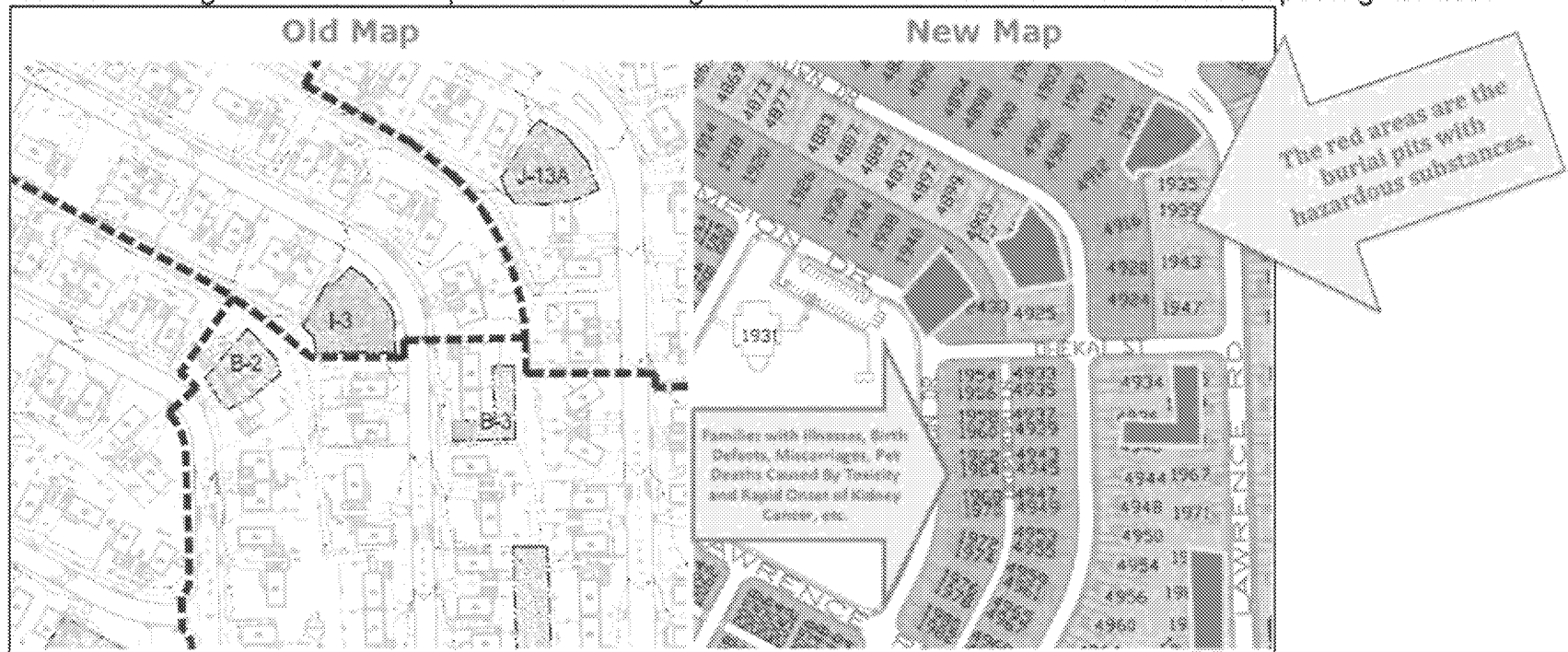
Written By: Walter Chun, Phd, CSP, CHSP, CHST
August 22, 2015

Attachment A Informal Survey of Adverse Health Experience in Late 2014



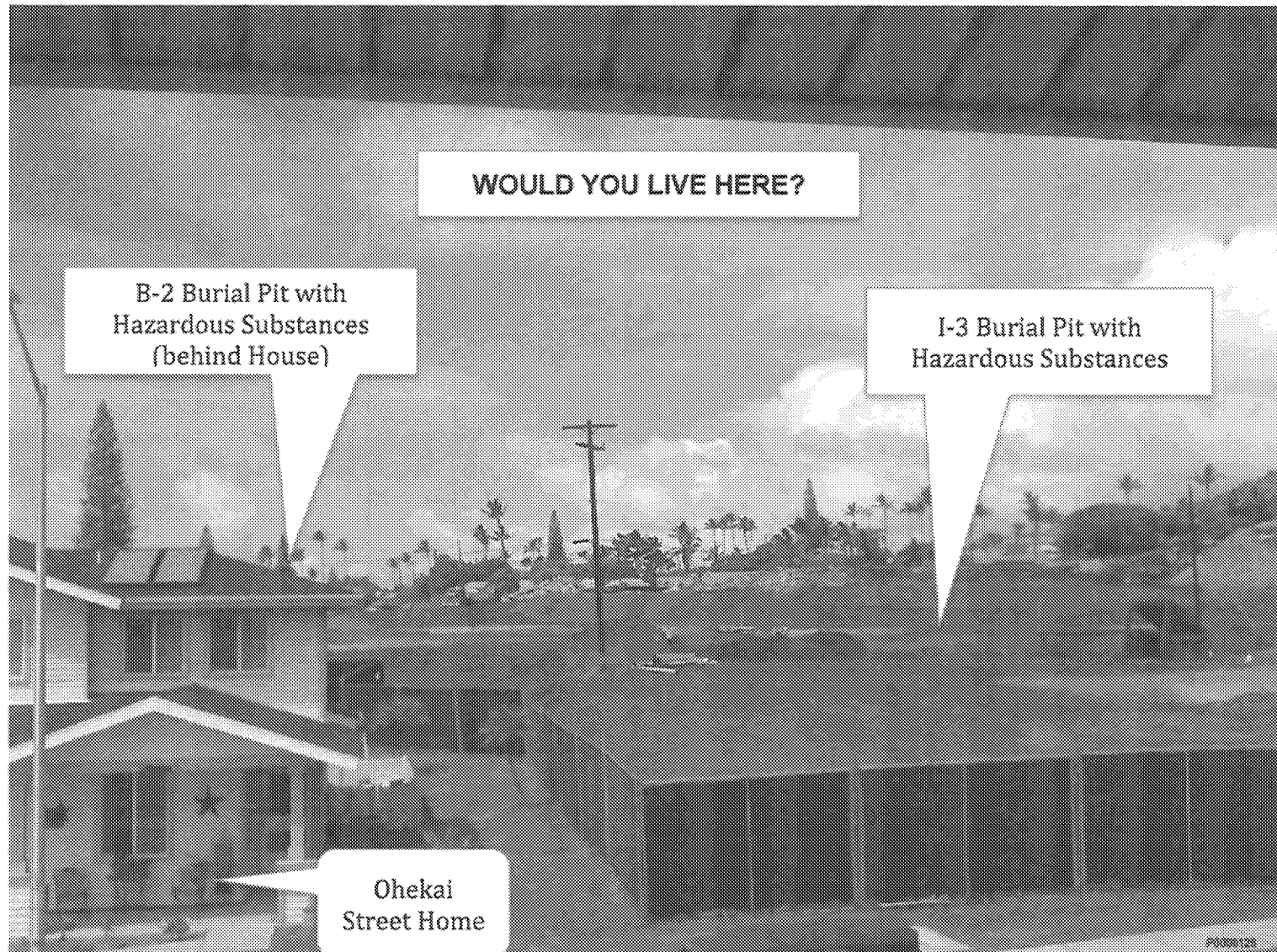
Attachment B An Example of Exposures to Unsuspecting Families

The shaded areas marked B-2, I-3, J-13A, B-3 and B-1 are "burial pits", with contaminated soils as identified by the contractor. The total volume of soils in these pits is provided in the Mololani Closure Report and reflects a total of 9,796 cubic yards for these areas. Transporting 9,796 cubic yards or about 9,303 tons of contaminated soils through occupied neighborhoods created exposures to the unsuspecting families. The residences marked with the yellow arrow above are examples where a few families suffered unexplained illnesses. Most important is the fact that these burial pits are located under the new housing. What are the exposures to carcinogens and hazardous substances to the unsuspecting families?



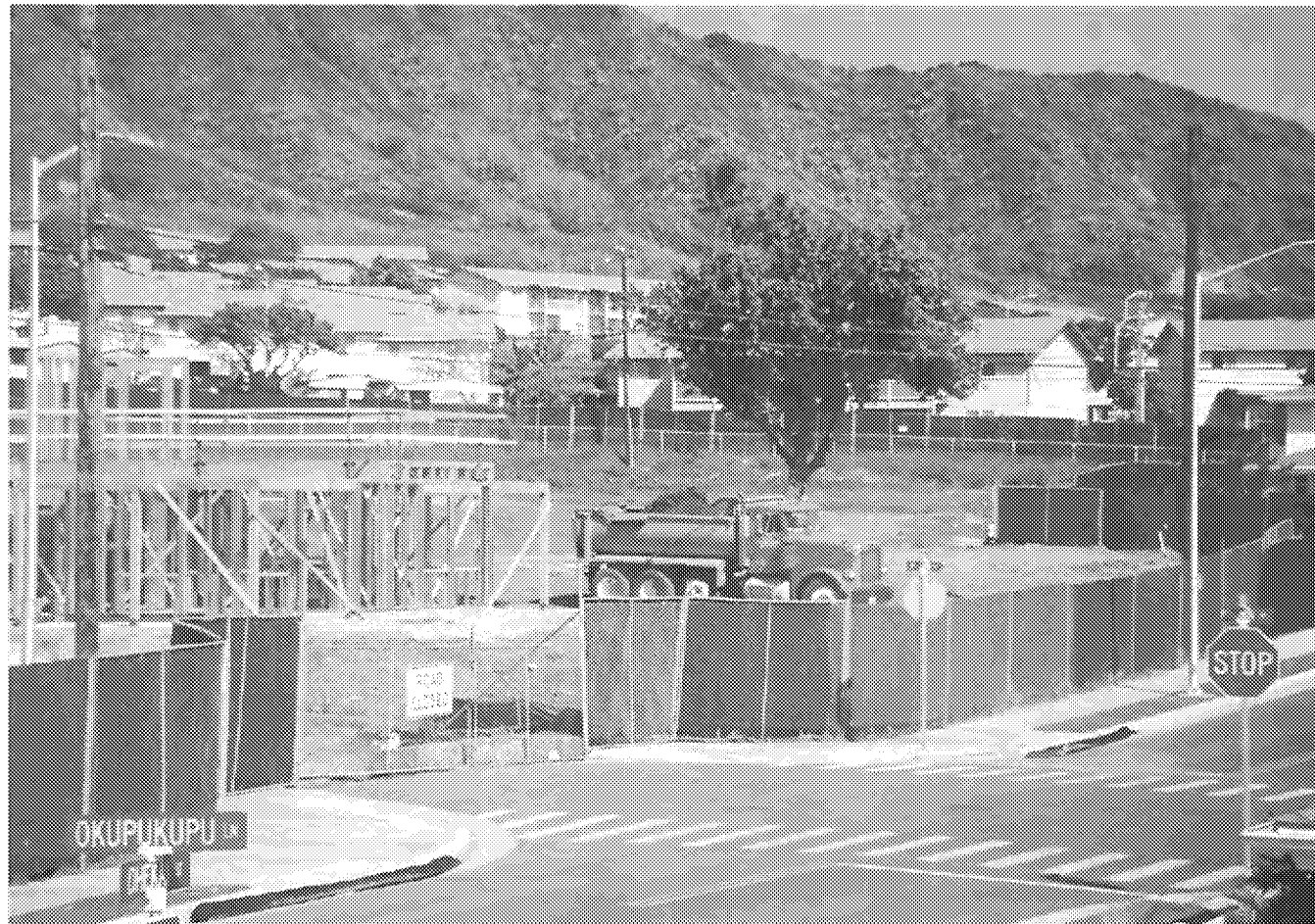
Attachment B An Example of Exposures to Unsuspecting Families

Attachment B Living in these homes while contaminated soils are moved around, burial pits are created, etc causes exposure to the carcinogens and hazardous substances.



Attachment B Example of Exposures to Unsuspecting Families

Example of trucks hauling soils in the occupied neighborhoods without protective covering to mitigate exposure to the contaminated dust and particulates.



Attachment C Health Effects - Excerpts from ATSDR and IARC			
Agency for Toxic Substances & Disease Registry (ATSDR) International Agency for Research on Cancer (IARC)			
Hazardous Substance	Target organs	Health Effects	Carcinogen by IARC
Chlordane CAS 57-74-9	Nervous system, digestive system and liver	Variety of nervous system effects, including headaches, irritation, confusion, weakness, and vision problems, as well as upset stomach, vomiting, stomach cramps, diarrhea, and jaundice. <u>It is not known whether chlordane will cause reproductive or birth defects in humans.</u> Studies of workers who made or used chlordane do not link exposure to the chemical with birth defects, but there are not enough studies in humans to know for sure. There is some evidence that animals exposed before birth or while nursing develop behavioral effects while growing up.	Group 2B
Heptachlor and Heptachlor Epoxide CAS 76-44-8	Liver	Animals fed heptachlor throughout their lifetime had more <u>liver tumors</u> than animals that ate food without heptachlor. EPA and the International Agency for Research on Cancer have classified heptachlor as a possible human carcinogen. EPA also considers heptachlor epoxide as a possible human carcinogen. This section discusses potential health effects in humans from exposures during the period from conception to maturity at 18 years of age. Some studies in animals suggest that young animals exposed during gestation and infancy may be very sensitive to heptachlor and heptachlor epoxide. Changes in nervous system and immune function were found in these animals. There is some evidence that similar effects may occur in humans, but a study that found some changes in performance on some tests that measure nervous system function is not conclusive and exposure to other chemicals cannot be ruled out. Exposure to higher doses of heptachlor in animals can also result in decreases in body weight and death in animal newborn babies.	Group 2B
Aldrin/Dieldrin CAS 309-00-2; 060-57-1	Results from animal studies show that high levels	Health effects in people exposed to smaller amounts of aldrin or dieldrin occur because levels of the chemicals build up in the body over time. Exposure to moderate levels of aldrin or dieldrin for a long time causes headaches, dizziness, irritability, vomiting, or uncontrollable muscle movements. Some sensitive people seem to develop a condition in which aldrin or dieldrin causes the body to destroy its	Group 3 (The EPA has determined that Aldrin and Dieldrin are

Attachment C Health Effects - Excerpts from ATSDR and IARC			
Agency for Toxic Substances & Disease Registry (ATSDR) International Agency for Research on Cancer (IARC)			
Hazardous Substance	Target organs	Health Effects	Carcinogen by IARC
	of aldrin and dieldrin cause effects on the nervous system and on the kidneys similar to those seen in people	own blood cells. Children can also be exposed by coming into contact with aldrin- or dieldrin-contaminated water, air, or soil near hazardous waste sites. Pregnant animals given aldrin or dieldrin by mouth had some babies with low birth weights and some with skeletal variations. Because these effects occurred in animals, they might also occur in humans. Aldrin and dieldrin can cross the placenta. Dieldrin has been found in human breast milk.	probable human carcinogens)
Endrin CAS 72-20-8	Studies in animals confirm that endrin's main target is the nervous system	<u>Symptoms that may result from endrin poisoning are headache, dizziness, nervousness, confusion, nausea, vomiting, and convulsions. Some of these symptoms may continue for weeks after exposure to high doses of endrin.</u> Birth defects, especially abnormal bone formation, have been seen in some animal studies. While there are no human data on birth defects, evidence in rodents suggests that exposure to high doses of endrin during pregnancy could be a health risk to developing fetuses	Group 3
DDD, DDE and DDT. CAS 072-55-9; 072-54-8, 050-29-3	Nervous system	People who swallowed large amounts of DDT became excitable and had tremors and seizures. They also experienced sweating, headache, nausea, vomiting, and dizziness. These effects on the nervous system went away once exposure stopped. The same type of effects would be expected by breathing DDT particles in the air or by contact of the skin with high amounts of DDT. Animal studies show that long-term exposure to moderate amounts of DDT (20-50 mg per kilogram [kg] of body weight every day) may affect the liver. Tests in animals also suggest that short-term exposure to DDT and metabolites in food may have a harmful effect on reproduction. Studies in animals have shown that oral exposure to DDT can cause <u>liver cancer</u> .	Group 2B for all

Attachment C		Health Effects - Excerpts from ATSDR and IARC	
Agency for Toxic Substances & Disease Registry (ATSDR) International Agency for Research on Cancer (IARC)			
Hazardous Substance	Target organs	Health Effects	Carcinogen by IARC
		Because of their smaller weight, intake of an equivalent amount of DDT by children and adults would result in a higher dose (amount of DDT ingested per kilogram of body weight) in children than in adults. DDT from the mother can enter her unborn baby through the placenta. DDT has been found in amniotic fluid, human placentas, fetuses, and umbilical cord blood.	

Attachment D Excerpts from Complaints Submitted by Residents to the
Hawaii Dept of Health

From: _____
Sent: Saturday April 25, 2014 2:26 PM
To: eric.sadoyama@doh.hawaii.gov
Subject: 2369 Pond Road; 2007 until 2010

My name is _____ (and I'm a retired US Marine Corps Lieutenant Colonel). We lived on Marine Corps Base Hawaii base housing from 2007-2010. Our address was 2369 Pond Rd, Kailua, HI 96734.

I lived there with my wife and two small children. I am very concerned that my family and I were exposed to demolition dust and soil contamination that was NOT disclosed by Forrest City (the base housing management entity). I believe this exposure caused several adverse health effects with my family, specifically:

- onset of pre-mature arthritis in me (shoulders, lower back, neck, hand)
- learning disabilities in several family members (memory loss)
- excess (chronic) intestinal issues in all family members
- allergies in my daughter, son, wife
- a chronic eye chilazian (in my right eye)
- appearances of mishapened skin moles on all family members

I am concerned that we will have other issues crop up as we move forward, and that the Navy and Marine Corps will have gotten away with something huge. My next door neighbor developed cancer, and my other neighbor had a miscarriage (when we lived there). I think there is a bad pattern emerging.

From: _____
Sent: Monday, April 28, 2014 1:55 AM
To: eric.sadoyama@doh.hawaii.gov

Subject: FC Housing issue

I am writing today in regards to the problems I faced and am now facing because of FC Housing while I lived on K-Bay. I lived on Blain Drive. I remember how excited I was to be in a tropical paradise. My husband and I went and filled all our paper work out and moved into our place by the sea. I figured if I wasn't going to see him for almost 3 years during this rough combat time, at least being here could keep my brain calm and occupied. I remember after signing our lease agreement we were given our folder about housing. Garbage, curb info, just general things to know. In that packet was the mentioning of 'lead', 'asbestos' and the spraying of chemicals for bugs around the house. It was played down, it was not mentioned on the lease we signed. I brought it up to housing and they said, "You don't have any children to worry about eating the window sills and if you see a tile exposed, just call the office."- very played down.

Our house had a fenced back yard. My husband was gone most of the time either in training or deployments and I was on my own. I got a bunny, named it Phoebe, and grew a garden. My garden was in the soil about 15 feet from the house. Within 2 months my first rabbit had a seizure and died. I figured because it was a rescue it must have been sick. My garden was going strong and I try hard to eat healthy and clean. Vegetables were coming in, herbs... I was eating out of it daily for a good year and a half. I found a second rabbit and named her Emma. She

appeared really healthy - I got her from the humane society. She lived in a hutch outside next to the garden and had run of the fenced in back yard like Phoebe did. After 3 months she had a horrible seizure and I watched her die. It was around now that I was developing pretty bad migraines. (I went to Tripler for care). I was not putting together the possibility that the chemicals could be further out in my soil, harming my rabbits or myself from eating vegetables grown daily or herbs grown there. (I drink herbal tea every night and prefer using my own flowers and herbs). The migraines never stopped for my time on the island.

I have attached a long letter that involved a housing issue of a rat infestation we had. From the demolition the rats were moving 'up the hill' as the housing office told me away from the demolition. Our house became infested and you will read how we were put on the back burner. The health and safety issues regarding this were horrifying to me and I can only say thank goodness I had no children. I had mold. I thought it was black dust from the demolition and so I just cleaned more and more... it came back faster and faster. I asked housing about the mold and they told me to clean with bleach. It just would come back faster and faster. No one ever came out to the house as I asked. By the time I was going to really get mad about it, our house was up for demolition and we were moved. I was worried about the dust I would see coming from down the hill (3 streets over) I am an avid runner and love to do half marathons, tri-Athlons. I would run on base just about every day. I have never had lung issues and being a prior Deputy Sheriff in _____ extensive testing in order to pass the medical exams. I started to have a very hard time breathing. It is documented at Tripler, my stay there. I was put on a breathing machine and had lower level of oxygen than I was supposed to have. They discharged me with an inhaler (something I have never needed). I also continued to have to go to Tripler for migraines. (again note that I never had migraine issues before moving there.)

Forest City continued to be negligent of many concerns as noted in the attached letter. I have no fear in expressing my concerns. I will fight for my health. My health now?

After leaving the island I started to feel tired. I couldn't catch my breath up the stairs and had migraines every month. I was a constant visitor at medical who couldn't explain to me if anything was wrong. I sucked it up. I watched my eating even closer and became a soy free, gluten free vegan. My blood work was coming back all normal. I was feeling good enough to hold jobs here and there, but my off time was not good. I had:

Fatigue and sluggishness

Increased sensitivity to cold

Constipation

Pale, dry skin

A puffy face

Hoarse voice

Unexplained weight gain — occurring infrequently and rarely exceeding 10 to 20 pounds, most of which is fluid Muscle aches, tenderness and stiffness, especially in your shoulders and hips Pain and stiffness in your joints and swelling in your knees or the small joints in your hands and feet Muscle weakness, especially in your lower extremities Excessive or prolonged menstrual bleeding (menorrhagia) Depression I was used to being healthy and active and though I had the above I pressed forward and tried to ignore what was wrong. I ended up in the hospital for a night stay due to my heart. The doctors in _____ couldn't figure out what was wrong with me. 3 years of this went by.

I am now in _____, I became much worse. I finally had a great doctor and through tons of tests they found:

1. A pituitary tumor
2. Hashimoto's Thyroiditis- where I require daily medication, my thyroid is dying and the autoimmune disease I will have for life.
3. Irregular Iron levels needing medication (I have normal iron levels but very low Ferritin levels- which is odd)
4. A mass on my ovary.

#4 is being dealt with right now. I am having the MRI on _____ to see if there are any other masses in my uterus etc. The ovary will be removed through surgery and it will be biopsied for cancer.

Not sure if you know a lot about Hashimoto's but it is pretty awful to someone who was so active and healthy. I will fight for my health and the health of others. If I knew then what I knew then? You would have heard from me.

I do not have a family history of Hashimoto's or pituitary tumors or ovarian cancer. Do I think I was made sick from living on Blain Drive? YES. I went there HEALTHY.... came out of there SICK. My pets died. I ate vegetables and herbs grown in contaminated soil that were ABOVE allowed limits for a year and a half.

Not sure what more you need. I Hope this can at least get you to look into what has happened. I can't imagine what has happened to children who played in that soil every day. It is NOT right. Please look into this.

From: _____

Sent: Monday, April 28, 2014 4:23 AM

To: eric.sadoyama@doh.hawaii.gov

Subject: RE: MCBH SOIL CONTAMINATION

Mr. Sadoyama,

My husband is in the Navy and has served for 25 years, we were residents for 4 years aboard MCBH. We have 2 boys and 2 Shih Tzu's. We lived at 6417 B Lewis Court from 7/2008 to 10/2009 in the Pa'Honua Housing and then from 10/2009 to 9/2012 in the Waikulu Housing in the new construction (which we were forced to move to).

In Waikulu there was an open field right in front of our home and for several months we had a big mound of dirt that they used and kept disturbing it to complete the remaining new homes in the section. We could not have the windows open at all because the dust was so bad. We had mold in our duplex and had so much moisture we bought a dehumidifier. We also had mold in our Pa' Honua house as well and it was always musty.

During the 4 years in Hawaii my health rapidly got worse and I have continued to have medical problems in the two years that we've been gone. I kept sinus infections the whole time I was in Hawaii and then found I had developed a small cyst in my nose in 2009. Which shouldn't have happened being the fact that I had sinus surgery in 2004. I kept bronchial problems as well. I developed asthma in January 2012 when I got a really bad case of bronchitis. I have severe migraines which have led to them giving me Botox injections in December 2008 and I continue to do so till this day. In 2009 I was diagnosed with Sinus Bradycardia and tremors. In January 2010 I had to have my right breast biopsied for a mass. Both my boys have asthma as well. Over the past year I have had problems with my thyroid and have been diagnosed with

hyperthyroidism with Graves' disease and I have to have it killed April 30th and will have to be on medicine for the rest of my life. My oldest son has developed cysts on his eyes that was caused by dust and debris and has to put cortisone drops in them daily or he could possibly go blind.

My too small Shih Tzu's have also been impacted. One scratched himself raw and had scabs just from being outside to use the bathroom and the other developed 2 cysts 1 on the back of his neck and the other on his tail.

I am writing you to please look into this matter. There are too many coincidences. At no time when we signed the lease did Forest City/Ohana Management disclose information to us about the possible soil contamination and the health issues it could cause to the entire family. I know that there are a lot of families not wanting to come forward because of the possible retaliation or to jeopardize their career. It is scary to think that we were living in Paradise but we didn't know the hidden dangers of the ground that our children were playing on and in our homes that we were living in were not safe. After all, as parents that is our main job to keep our children safe. Right? We don't know the short term or the long term effects of the exposure to the pesticides carcinogens or other contaminants. We don't live there now, but I am aware that Forest City states that MCBH is safe and they refer to the elevated concentrated pesticides carcinogens in the topsoil as "low levels".

It is sad to think that our brave men and women serve our country and get in harm's way, not to mention their families but then have to come back home and get poisoned on their own soil by a MULTI-BILLION DOLLAR company.

Regards,

From: _____
Sent: Tuesday, April 29, 2014 9:26 AM
To: eric.sadoyama@doh.hawaii.gov
Subject:

Mr. Eric Sadoyama April 29, 2014
Hawaii Department of Health
Dear Sir,

My family has lived aboard Kaneohe Marine Corps Base Hawaii (KMCBH) since late August 2009. We lived at 1956 Campion Drive until 2011. We were, then, moved to 1858 Harris Avenue, where we have resided since.

Upon our arrival, Forest City did not disclose the types of contaminants present in the soil or the continuous exposure to them, due to the demolition of old housing structures. Although houses were being demolished all around us at our Campion Drive address, we believed we were safe, until our family members became persistently ill within months of settling into our housing. These included frequent and unexplained respiratory illnesses, neuropathies, endometrial enlargement. Our dog experienced two bouts of severe gastrointestinal bleeding, which resulted in two intensive care stays at the veterinarian. The frequency and severity of these illnesses became exhausting and debilitating and inflicted undue mental duress.

These illnesses caused considerable stress on our family, and prevented my return to full time work, because I was perpetually caring for ill family members. Despite requests for assistance from Forest City and my husband's chain of command, little was done to address the ongoing exposure to demolition dust. There were no nearby play areas for children, and we threw away numerous articles that became infested with mold, despite daily, meticulous cleaning. We felt betrayed.

Our son required therapies offered through Easter Seals, and then moved on to the Head Start program on board KMCBH. These interventions were helping, so when we were offered housing on Harris Avenue, we moved. Remaining on base allowed him continued access to these programs. However, demolition was, still, ongoing, and his frequent illnesses did not immediately cease.

Frustrated and upset, we began to look for answers that, still, remain elusive. The lack of oversight and available evidence supporting the safe levels of contaminants we were, certainly, exposed to is beyond alarming. Furthermore, it may have seriously affected the health of my family, and its fallout may have severe, cascading consequences. My family would like conclusive evidence regarding these contaminants. Our current and future health, with their associated circumstances, depend on it.

Thank you for your time and consideration.
Sincerely,

From: _____

To: eric.sadoyama@doh.hawaii.gov

Subject: MCBH Soil Contamination Date: Wed, 30 Apr 2014 09:56:14 -0400

Dear Mr. Eric Sadoyama,

I wanted to write to you regarding my concerns with the soil contamination on Marine Corps Base Hawaii.

I lived at 2104 Mahannah Loop from August 2010 until October 2012. During this time, Mololani neighborhood was under construction. The construction surrounded our living space: directly in front of our house was a giant dirt pit that was to be a dog park and to our left housing was underway. On a DAILY basis our patio furniture was covered in dust, dirt, and debris. The construction was so unsightly and uncontained that I even asked if we could pay less of our BAH (basic housing allowance) while we were living there. This was not granted because the Forest City said the housing was safe and livable.

During this time, I was pregnant with my first child. I had two dogs that ate the grass in our yard, got the dirt on their paws, and often brought it into the house. I, along with ALL of my neighbors that faced the future dog park, suffered from severe allergy symptoms during this time: headaches, congestion, irritated eyes, a general feeling of being "unwell".

To know that due to the LACK OF INFORMATION, and MISINFORMATION given to me by Forest City, I put my daughter's health in the path of dangerous carcinogens sickens me. Forest City

NEVER disclosed that contaminates were present in the soil. I WOULD HAVE NEVER LIVED ON MCBH HAD I KNOWN ABOUT THE SOIL CONTAMINATION! We gave Forest City thousands of dollars of our BAH while they knowingly exposed us to toxic chemicals, the affects of which may take years to manifest.

Regardless of whether the Navy or Forest City decided—according to their own self-interest—that these exposures were safe, residences should have had the opportunity to decide for themselves what was safe for their families (perhaps according to the EPA's guidelines).

The fact that military families often move far from their homes makes them vulnerable; they don't know where the safe neighborhoods are, and it is difficult to coordinate moves that span the globe. For this reason, many military families TRUST the housing offered to them on the military bases.

Knowing the soil was contaminated and our family was deemed disposable BECAUSE of the unique situation the service to our country puts us in, I cannot help the feelings of betrayal of all those who allowed this to happen either by conscious decision or by conscious lack of action.

My husband was deployed to the war in Afghanistan while his family was poisoned at home.

I would like to know, at any level, how this was and continues to be justified.

Sincerely,

From: _____

Sent: Monday, May 05, 2014 2:30 PM

To: _ (This email was forwarded to Eric Sadoyama at the Hawaii DOH) _____

Subject: MCBH Housing Issues

May 5, 2014

To Whom It May Concern at Hawaii DOH:

I am writing to you to express my concern over the Marine Corps Base Hawaii Housing, Kaneohe Bay. We were stationed and lived in base housing from 1997 to 2009. During this time period our family lived in two different areas on base and we were exposed to numerous conditions that concern me as I have become aware of the contaminated soil that was surrounding our housing areas.

Our first house was on 2420-A Dodson Street, this house was an older home and I believe built out of cinderblock. We spent a lot of time outside planting plants, improving our yard, growing vegetables in our garden and allowing our children to play on their swing set constantly. One problem that we ran into while living in this home was a growth that was bubbling the paint and coming through the cinderblock in my son's room. We reported this to our housing office , they came and observed it and eventually offered to treat the cinderblock which would require us to be out of our home for a while at our own expense. They said the growth was harmless and that the chemicals used to clean, seal and repaint would probably be far worse than just living with the walls seeping. Another problem we endured was the tearing down and demolition of the housing areas directly across the street from us known as Cochran housing. We lived through all phases of this rebuild process such as the demolition and all the way to rebuilding of new housing. Once demolition occurred they put up black tarps on fences, but it did not keep out the extreme dust and debris that covered our vehicles, windows and houses daily. Once in a while a

water truck would be seen driving through the site spreading water, but with the ocean breeze and tarps constantly ripping and not being repaired, it was a daily chore to constantly spray our own housing area and vehicles down with water to try and clean the dust off. We were one of the last families living in this area of old housing before being moved to a different location on base.

Our second home was 6284-A Gier Street. We moved into this home approximately 2001-2002 time frame. Once again we began gardening projects, digging up the soil around the home and putting in vegetation and flowers to improve the appearance. We lived through the extended rain period in 2007 where we had mud flowing from the hill and collecting against the wall in our back patio area.

I personally worked on base at the Head Start program for about 11 years and in that time frame worked at two different locations on base. Each location that I worked at had constant construction and tearing down and rebuilding of houses. The dust from the construction sites was evident on our outdoor playground toys, the windows, and vehicles.

I have three children, two of them lived in Hawaii for 12 years and our youngest born in 2007 lived there for 2 years. My children were always outside playing on the grass, around the homes and playgrounds. Some medical conditions that my children came down with while living in Hawaii were walking pneumonia, asthma, hives and ADD. My older son began having coughing episodes while we lived in our first home and was the one that came down with asthma at 4 years old, then walking pneumonia twice and eventually diagnosed with ADD. My daughter began getting hives that would come on suddenly after she had been playing outside in the yard. These conditions continued while we lived on base but subsided after we moved from Hawaii in 2009. Within the first year of moving my son was able to get off his inhaler and no longer has asthma. My daughter has not had any episodes of severe hives.

During our time of living in Hawaii we had two dogs. Our oldest was a medium sized dog 55 pounds who lived to be 15 years old. Our smaller dog, a Pomeranian, we purchased while living in Hawaii. Less than 5 months after we moved from Hawaii she suddenly came down with liver failure and passed away at less than 5 years old. There were numerous times where we would let her outside in our yard in Hawaii and when she came back in she would start vomiting. We were never able to figure out what was going on with her and attributed it to her possibly eating something in the yard because her vomit was always frothy and no detection of what had been ingested.

I am extremely concerned over recent information that I have read about all the soil contamination that was evident, but not exposed to residents on MCBH. I am concerned about the long term affect that living in the conditions that we did for so long, twelve years, and never being notified by any housing or privatized housing about the levels of contaminants, elevated concentration of pesticide carcinogens allowed in the topsoils and extended exposure to the years of demolitions.

My family lived on MCBH much longer than your "normal" military family who usually stays less than three years. Twelve years total of living under these conditions and thinking that we were "safe" in our homes and around our home and now finding out that many issues were possibly covered up has me wanting questions as to WHY!

I hope to hear back from you regarding this concern.

From: _____
Sent: Sunday, April 27, 2014 5:31 PM
To: eric.sadoyama@doh.hawaii.gov
Subject: MCBH Contamination Issues- _____

Good Evening,

I'm writing in response to the concerns regarding Forest City Military Housing and the soil contamination on MCBH Kaneohe Bay.

My family and I resided on Lawrence Road in Mokolapu (Capehart) Housing from April 2007-Feb 2008 Then relocated to Hawaii Loa Housing on Gier St from Feb 2008- May 2010. While on Lawrence Rd, the area immediately surrounding us was demolished. It was during this time we kept inquiring with Forest City when we would be able to move as the debris/dust/mold/lead paint peeling and chipping of the walls (and rat/termite infestation) in the home on Lawrence was unbearable.

Housing told us just not to touch the walls, don't wipe the walls and sweep up the flecks of paint when we see them on the floor and to not let our crawling toddler put her hands in her mouth. We were told rat traps would help (they did, I caught quite a few on my kitchen counter) and that there was nothing they could do about these items, we just wait our turn to be moved into other housing. Even at the request to be moved early or have these items fixed: we could not be moved early- we HAD to wait our turn according to their map of how they were demolishing the homes.

As houses were being destroyed around us, the vermin and insects would inundate us by relocating to our home. The debris would be evident as, with the lack of an air conditioner, the windows had to be kept open to allow for ventilation and the dust would accumulate at an extremely rapid rate. The "dumping ground" was a big pile of dirt located just a couple hundred yards from my house, near the beach. Unbeknownst to me at the time, it was causing medical related issues such as severe, debilitating headaches (which medical could never diagnose the causation and eventually sent me to a psychiatrist) and constant sinus infections. It also could possibly be linked to tumors and eventually the death of our family dog due to lung cancer in 2012. Due to these stressful events, of course, it caused marital discord and emotional pain and suffering on top of the physical symptoms.

I finally received an allergy test this year and it turns out I'm HIGHLY allergic to mold and dust mites and rats (which was most likely the causation of the headaches while being housing on MCBH) and since being treated and removed from contaminated areas, the headaches/sinus infections are being subdued due to ongoing treatment. Before Hawaii, I did not have allergy symptoms which is possibly why it stumped my health care practitioners at both MCBH clinic and at Tripler Hospital.

My daughter was 18 months-4 years old while we were living in Forest City Housing and at 5-6 years old began to have neurological vision problems, which she was seen for at Bethesda Medical Center in Maryland.

My husband was plagued with gastrointestinal tract issues while in Hawaii.

Forest City failed to notify us to the extreme conditions that we would be exposed to, otherwise we would have never have entered a housing contract with them. We thought we were safe and given suitable housing but instead all of this has caused lifelong problems, the death of a family pet and stress beyond comprehension. The companies or agencies involved should be held accountable and understand just how their decisions to misinform (whether deliberate or accidental) about the chlordane contaminated soil affects human beings and generations of those families.

Sincerely,

From: _____

To: eric.sadoyama@doh.hawaii.gov

Sent: Sunday, April 27, 2014 8:53 AM

Subject: Health Problems after Sent: living on MCBH

Hello Mr. Eric Sadoyama,

My name is _____ and I lived aboard Kaneohe Marine Corps Base Hawaii (furthermore MCBH) with my husband, _____, and two sons, _____ Jr. and _____, from 1998-2001 and from 2007-2010. I would like to share with you the experiences we had with strange health ailments, and ask that you investigate this matter further.

When we arrived aboard MCBH in 1998, we were informed that the house we were moving to, on the former Fleming Circle, had lead paint, and were advised not to allow our children to ingest the often peeling paint chips. There was no additional information given about any other possible contaminants.

Very soon after we moved to Hawaii, my oldest son, _____ Jr. developed breathing problems. He had to go to the emergency room multiple times, as an infant, because he could not stop coughing enough to breathe right. No diagnosis was given at the time, but his coughing fits, which sometimes lasted days, was of great concern to us.

My youngest, _____, seemed to be fine, besides a minor issue of having crossed-eyes, but that would not last.

In 2001, I began experiencing pain in my lower abdomen, and having painful migraines. These symptoms continued on after we moved that same year.

In 2003, while living in Colorado, I was diagnosed with trigeminal neuralgia, which is a painful neurological condition.

I was not the only one experiencing problems. My oldest son, _____ Jr. was experiencing educational difficulties, and was diagnosed in 2002 with a Processing Delay, nonspecific, indicating that he was not processing at the normal speed of a typical 4 year old, but that they couldn't determine what was causing his delays. However, his coughing fits all but went away.

In 2006, my abdominal pains continued, and I was found to have a growth on my right ovary. I had to have surgery, and was diagnosed with the following:

Poly-cystic ovarian syndrome, adenomyosis, endometriosis, and interstitial cystitis. I was also subjected to a frightening cancer screening, which took four weeks to come back as negative, thankfully.

The surgeon who performed my operation commented that he was surprised to find so many disorders co-occurring in a young woman my age. At 26, I was told I needed to have a hysterectomy, which I declined, and instead opted for hormonal treatment via birth control pills. I also began a life-long pain management plan of pain pills and anti-inflammatory medications.

That same year, I opted to get further diagnostic testing for my oldest son, _____ Jr., and he was diagnosed with Asperger's Syndrome. He required an IEP to have special services at school as well as occupational and behavioral therapy.

My youngest son, _____, required glasses for his vision, but otherwise seemed healthy.

In 2007, we moved back to MCBH, and were excited. With us, were our two cats, _____ and _____. At the housing office we were given a packet and told, briefly, by the housing representative that our homes were completely safe, and that if we played outside or gardened, we just needed to wash our hands. No references were made to things like: walking barefoot, growing vegetables/herbs, or specifics on the toxins in the soil. Nor were we told that the levels of toxins, such as chlordane and heptachlor, among others, exceeded the EPA's recommended guidelines. We were led to believe that our homes, lanais and surrounding areas were completely safe. There was no mention of danger to our pets, either.

About six months after moving to Lawrence Ave. on MCBH, we were told that our homes were being torn down for construction, and moved to a new house, on Gier Lane. During that time, there was a lot of construction going on towards the Fort Hasse side of the base. New homes were being erected in quick succession and there was almost always construction debris in the air.

We often kept our windows open, and adopted the habit of removing our shoes indoors. So anything coming through the windows, we breathed in, and whatever landed on our floors, we walked across, regularly. Within thirty days of moving to Gier lane, our cat _____ became deathly ill. We took him to the vet, where she diagnosed him with rapid-onset leukemia, and thirty days later, he was put to sleep.

If you are a pet owner, you know how tragic it is to lose a pet. _____ was only 3 years old, and before the move, a frisky, vivacious kitten.

My son _____ Jr.'s strange coughing fits returned. We told ourselves this was "because of the vog" but that did not make much sense, since the vog did not penetrate the windward side of the island often enough to cause the problems he was having. My son was diagnosed in 2008 with "cough variant asthma" which was related to respiratory ailments. He was prescribed an inhaler and a nebulizer, which he used often to suppress the chronic, painful coughing he experienced.

_____ Jr. was also seen at Tripler Army Medical Center (furthermore Tripler) by a pediatric neurologist because there were concerns about his growth charts. My husband and I are both on the short to average height range, and at 9 years old, my son outgrew me, and there was concern he had a pituitary disorder.

The results were negative for any disorder of his pituitary, but an age-test performed on his skeleton revealed that he had an advanced-age skeletal structure. There was no known reason for his advanced-aging skeleton.

My son _____ began having episodes of talking in classroom that caused him to get into a lot of trouble. He also had lots of neck pain and neck twitching. We did not realize then that our son was displaying early symptoms of a neurological disorder.

I developed increased headaches, and chronic fatigue, which were attributed to everything from obesity to being depressed. I was overweight, but not significantly so, and was far from feeling depressed. It was difficult to understand why I felt the way I did.

My pain continued, and I saw various doctors, but was not given a concrete diagnosis. I also developed melasma, a skin-pigment disorder often seen with women who are pregnant, although, I was not pregnant.

My oldest son _____ Jr. began experiencing episodes of rage. It was terrifying. In 2009, our son was placed in Kahi Mohala, which, if you are not aware, is a mental hospital for adolescents and teenagers.

He was prescribed anti-psychotic medication and remained in the hospital for 6 weeks. It was an awful experience to have as a family.

Finally, my husband _____ developed a strange rash across his arms and head which was treated multiple times by various topical ointments, but did not heal until he deployed to Afghanistan.

In 2010 we moved from Hawaii to Virginia. Shortly after our move, while staying in a hotel and waiting for a house on the Marine Base in Quantico, I developed symptoms of dizziness, vertigo and nausea.

I also developed mid-cycle bleeding, which was strange, as I take hormonal birth control pills to control the other diagnosis I have.

My son _____ also began having more painful and regular tics which caused us concern. After taking him to the doctor, and finally seeing a pediatric neurologist, he was diagnosed at 12 years old with Tourette's Syndrome. It is believed that he had Tourette's for a few years and was not properly diagnosed.

Tourette's is commonly seen as a multi-generational disorder in families, yet no one on either side of our family has Tourette's.

My oldest son _____ Jr. experienced something altogether different upon our move to VA, he got better. He no longer expressed rage, nor did he need to continue the anti-psychotic medications. In fact, his behavioral shift was so startling, we did not recognize the young man in our home.

Not only that, but my son has not needed his inhaler or nebulizer once since leaving Hawaii in 2010. I have to wonder what it was about our living conditions that contributed to his breathing difficulties. It seemed for him, the move to VA was a blessing.

I on the other hand did not fair as well. In 2011, after continued strange symptoms, including violent headaches, facial twitches and chest pain, ended up in the emergency room with dangerously high blood pressure, double vision in my right eye, inability to walk to write, and slurring my words. There were three diagnosis given to me, and to this day, we are unclear as to what happened. One doctor told me I was experiencing something called a dystonic reaction, another said it was a "complex migraine that mimicked a stroke" and a third suggested a transient ischemic attack (TIA).

I was under the care of a neurologist, who found long-standing damage to my trigeminal nerve, and was also diagnosed with sleep apnea. I was under the care of a cardiologist, who diagnosed me with costochondritis, a nonspecific pain of the chest, typically seen in women. I was under the care of an obstetric surgeon, who again wanted me to have a hysterectomy to remove my uterus, and possibly, my ovaries. I was given injections of Lupron, a strong medication that shut down my ovaries. I was also placed on additional hormonal therapy. I was only thirty one years old.

No one else in my family has the strange symptoms I had, and I believed for a very long time that I was just an anomaly.

However, in 2014, after moving to California, I learned about the soil contamination at MCBH and the exposure to chlordane, heptachlor, and other toxins that were not disclosed to residents, including my family.

I began to do research, and found startling references to reproductive disorders, neurological damage, rashes, and pet deaths in conjunction to exposure to these very toxins.

As you can imagine, I felt betrayed. My family and I have all suffered from various health issues, all of which began when we moved to Hawaii. All that I can ask of you is to consider the possibility that the contaminated soil, with higher than EPA advised levels of chlordane and heptachlor (and other toxins) might have contributed to our family's problems.

As an active duty military family, we trusted that where we were sent to live was safe, and uncovering the truth, that there were dangerous levels of contaminants in the soil of which we gardened, ate vegetables and herbs, and played, as well as breathed in and absorbed through skin-contact, has caused us great distress.

You are in a position to help, and to do what is right by the families who may have suffered from this hidden exposure to dangerous contaminants. We are asking for a full-scale investigation, that will not be influenced by the Department of Defense, so that the results obtained will be honest and forthcoming.

We are asking for the truth, and for your help finding that truth. Once we know what we have been exposed to, and the effects it may have caused, we can better treat ourselves, and protect future families who may be exposed to the same ailments.

I appreciate your time, and I pray that you will do what is right, and what is required in this situation.

Mahalo nui loa,

From: _____

Sent: Friday, May 09, 2014 7:11 AM

To: (This email was forwarded to Eric Sadoyama, HIDOH)

Subject: Fw: MCBH Housing

Aloha Eric,

My family is a current resident of Forest City and we live on the Marine Corps Base in Kaneohe. My family has lived in our home since July 2010. I have two sons who have a genetic disorder and have been given the EFMP status. The Exceptional Family Member Program is a program that works with military and civilian agencies to make sure families receive support in the community, with housing, and with educational and medical services. After living in our home for a year we found a large amount of mold throughout our home. The mold was located upstairs and downstairs and was growing on the outside of our A/C ducts, various clothing items, suitcases, my daughter's crib, curtains, linens, pillows, and shoes. My husband and I expressed our concerns to Forest City and after numerous calls and visual inspections Forest city hired Belfor to remediate the mold. Belfor came to do the mold remediation in July 2011. By October 2011 the mold had returned and once again after visual inspections and numerous calls Belfor was sent to our home again to do some touch up remediation. In January 2012 a large amount of mold returned and was now covering whole books shelves, as well as numerous clothing items and linens. We went through the same process and Belfor returned again to remediate the mold. In March 2013 my son was diagnosed with airway recessive disease and we were told that he had allergies. He was given an inhaler to use when needed and was also given an allergy medicine to take every day. By June 2013 the mold had returned in the master closet as well as inside the A/C vents. I called Forest City in June to let them know that the mold had returned. After more then 5 visual inspections and multiple calls/emails to Forest City the mold was finally remediated a fourth time in November 2013. In August 2013 my son was diagnosed with Asthma and was prescribed two inhalers. He was also given an allergy test, which shows that he has a severe mold allergy. Throughout this process we received multiple assumptions for the cause of mold. A couple of these assumptions were: we live in Hawaii and mold is common in the home, our lifestyle, boxes and dive gear that were stored in the attic, dirty A/C unit, and because we do not open up the windows in our home to air out the house. At this time I do not know what the cause of mold in my home is due to, but I do know that exposing my family to mold is unacceptable. And while struggling for three years through this mold nightmare, I learned about the elevated levels of dangerous pesticides in the soil of our yard and housing area that Forest City NEVER disclosed to us or any of my neighbors! Given that my two sons already have a genetic disorder and are level 4 EFMP's (severely disabled), this is absolutely unacceptable! Our families know better than to believe the misinformation that Forest City is now giving everyone, but many residents don't understand and simply want to believe everything is fine or, better yet, don't want to risk their military careers or housing privilege by voicing their fears. However, many just don't even realize that the "low level" of pesticides

Forest City refers to is already above EPA standards and exposes our military families, many of whom live here much longer than 6 years, to increased health & exposure risks. Furthermore, whoever came up with the idea that we'll only be exposed 6 years or less failed to factor in that we're stationed from one contaminated base to another and, as such, our exposures persist long before and after our years in Forest City's MCBH housing. To think that any private housing corporation would think this acceptable is unbelievable given that our spouses risk their lives to protect & defend our country and freedoms! The least our active duty spouses and military families deserve is safe housing and the ability to trust those who provide the same will do so with honesty & integrity! All these lies, deception and manipulation are disgraceful!

I pray that the HDOH realizes that just as Forest City hasn't cared about the mold infestations in our homes, they haven't cared about honoring any of the environmental, health & safety regulations they said they would follow in their Pesticide Soil Management Plan! They did NOTHING to protect our military families from harmful exposures during their demolition/construction or thereafter. We were all exposed to pervasive demolition dust and had no clue that it could be harmful to us or that no fugitive dust emissions should have ever escaped their project sites. In fact, even when residents complained to Forest City & the DOH (clean air division) about all the demolition dust making our families sick, Forest City still didn't tell us anything about their requirement to protect us from pervasive demolition dust. Now that some residents have gotten their attention, Forest City is doing all the damage control they can to make it look like they implemented & maintained the institutional controls they were supposed to do all along! They're even going around and pressure washing everyone's home now to make them look clean, despite that residents have been asking them to do this for YEARS to no avail! They have even gone around and instructed residents who had gardens in their yards to dig them all up and not garden anymore.

The HDOH needs to find out what is REALLY going on and stop just taking Forest City's word for whatever they claim to be doing because they're just full of lies. Our military families need an advocate and I would expect the HDOH to be one of the first to take a stand on this issue, if not for our military families, at least for the state and residents of Hawaii.

Sincerely,

_____ attached this letter to Eric in an email she sent me and asked that I hand deliver it to him when we meet.

Dear Director of Health,

My name is _____ and I am writing you today to inform you of the health problems my family alone have been dealing with. It has come to our attention that while aboard Marine Corps Base Kaneohe, HI we were exposed to 20 times the EPA's action level of 1.66 ppm for Chlordane not to mention there are other chemicals that were found. My family alone has been dealt with health issues such as Asthma, Dysphagia, skin conditions, allergies, and Neurological disorders. As a mother of two beautiful children it kills me to know that they were exposed to poisons that we knew nothing about. What is even more disturbing is that it can take years for things like Cancer to develop and yet we were sent from one contaminated base to another so saying that families will only be exposed for a short period is a pathetic and sickening excuse. The Forest City manager stated that the housing development was created to improve the quality of life for the families is quite bologna. In fact it did not improve the quality of life for my

family it made our quality of life very different. Now we consider our quality of life taking allergy medications everyday, carrying inhalers because our son and my husband have difficulty breathing and the Neurological disorders we all deal with on a daily basis. My family lived in Hawaii right at the time of demolition and new construction approximate dates are July of 2008 to Dec of 2012. It was also brought to my attention that before the demolition began that a letter was to be sent out to families to warn them about possible dust in the air that could possibly be contaminated and yet no one on base received that letter. Although we no longer reside on MCBH we would like answers to the questions that are being ignored by Forest City Management. As a family who has sacrificed so much already we have the right to know what exactly it is that we were exposed to. My family along with others would like to see the supporting data and how it was applied to MCBH. It is in the best interest of all the families who have lived on base in the past, present, and future to be well aware of the contaminations while living aboard MCBH. Failing to not take action because there have not been many complaints from families is just a ridiculous excuse not to take action. Families have every right to know what they were exposed to. Is it not your job as the Director of Health to keep people safe from environmental hazards that could potentially kill people and cause miscarriages? I cannot wrap my mind around the ignorance that has been displayed by people who have titles such as yours and that of the Manager of Forest City, John Pampalone. If it were your family what would you do? Would you sit back and accept all the lies that you are being told, or would you take action like many families who have tried to get answers but keep getting ignored? What if your child, husband, or yourself were exposed to such harmful chemicals, what kind of action would you ask for? I hope that in the end you will do what is ethically and morally right. Our families never asked to be placed on such tainted soils but we had no choice and never knew and I can assure you that if we had known we would have fought for what is right.

Best regards,

The _____ Family

From: _____

Date: April 27, 2014 at 9:59:04 AM HST

To: "eric.sadoyama@doh.hawaii.gov"

Subject: MCBH mold and soil concerns

Hello! Just wanted to write you a bit of what both my family and I have been going through since we've started living on base back in 2009. We were here living in 802 housing through out the demolition... I remember my son _____ playing outside in the dusty soiled "back yard" and having to bring him to constant drs appointments for his rashes and eczema. Shortly after the eczema started, the constant night coughing would start. The doctors said that there wasn't anything that could be done. They had no clue what it was... As did I. I made sure the house was virtually dust free, sheets were cleaned, and spent countless hours vacuuming and dusting. I then started noticing that every Tuesday when the lawn crew came they were blowing all the dust and debris right into our screened back doors. I asked them to stop, but it went on deaf ears and it continued for a year. I'm quite certain that the dust from the lawn was making us sick. Upon leaving to live in Florida for a year while my husband went to Afghanistan, I was relieved. My sons skin cleared up and the coughing stopped completely. I had always known that these homes were poorly constructed, but this was just the beginning of the worst. A little more than two years ago we moved back to Hawaii, we received a new house in the Waikulu section of base. Upon signing the lease I asked the representative if it was safe to plant and make a garden. She told us that we should have no concerns, but they would like is to pot plants since

they don't want holes in the yard. I was so glad to finally have an area where I could start growing my own vegetables. I never knew that we would start getting sick. I had always thought that the mold inside our home was the issue. My master closet was filled with it. The bathroom wall had caved in and was releasing the most disgusting stench that I have ever smelt. I called forest city for 6 months trying to have them come out and do a mold scope. Finally a group of people came out and the determination was that since they did not see mold on the exterior of the wall, that there was no mold in the house. They saw the caved in wall in the bathroom and did not even schedule anyone to come fix it. I called Cathy Hooda and Barbie Quinones at least 50 times in the next 3 months with no response. At the time I was suffering from horrible migraines, abdominal cramping and severely heavy periods. I could not get pregnant for two years. I never went to the doctors because I thought that I was just getting older, I have two healthy children so it must just be that I'm tired. Until I spent two hours in my closet cleaning it out. I pulled out a pile of clothes, purses and shoes filled with black and green mold. I became dizzy and so severely nauseous that I had to lie down. I immediately called forest city and told them of what happened and that if they didn't come out and look at the wall connecting my bathroom, closet and Julian's room that I was calling a lawyer. Needless to say they were at my house cutting out the moldy wall within a week. I had lost over \$700 worth of clothes and personal items, was told by Cathy Hooda, Barbie quinones's assistant to come in and fill out a reimbursement sheet which was later denied. After reading about other families on base that were going through similar issues, I called Cathy numerous times to receive a copy of the reimbursement form, but she still had not sent it. I've been calling, sending her emails for the last 4 months about this. What a waste of time. Since living in this house _____'s cough has gotten worse, eczema had damaged and discolored the front of his two shins so severely that it looks like vital ago. We've sent him to countless allergy/mold tests. Holding down an autistic child and trying to calm him while he's getting stuck with needle after needle breaks my heart. I recently had a miscarriage after six weeks of pregnancy and still can't get pregnant. We've tried to look for housing off base, but unfortunately everything in our area is too expensive and small for our family of 4. I keep wondering when will they be held accountable for making us sick and not doing anything about it? We've lost money time, a child and still forest city acts as if they have done nothing wrong. We pay them all of our bah and they don't even call us back when we have concerns. How is this allowed by any state regulations? There has to be a way that they are being held accountable for the way they are treating us. There is scientific facts that show they are negligent and still we are having to continue being sick. I'm sorry that my husband and I are are sacrificing for a country that will allow for this to happen to our children. Hopefully my letter will reach you and you will act, not just sit around like everyone else.

My warmest regards _____

From: _____

Sent: Saturday, April 26, 2014 6:35 PM

To: eric.sadoyama@doh.hawaii.gov

Subject: MCBH concerns

Hi Eric,

My name is _____ and my husband is active duty NAVY, we have 2 girls (that are now 9 and 5) We moved to Hawaii November 2011.... We lived in a hotel for 3 months (they did not have housing available) then Forest City housing offered us an older home that was going to be torn down and new homes built (if we moved into this old home we would be gaurunteed a

new home) we were actually right next to the construction - could see our home and all the new homes being built.

The home we were in from January 2012-march 2012 had mold and we had to sign that we were aware their "might " be mold, asbestos , lead paint etc..... We signed with reluctance but we were over all the way across The Mainland to Hawaii and they had NO HOME for our family , but we knew it would be for just 3 months until we moved into our new home.....

We moved in March from the old Borderlon loop to the new Ulupau loop(the brand new home) we were Thrilled !!!

At first I didn't mind the noise, the dust, debris, the huge black tarpe and fence between our home and the new ones being built, We were just so happy to have a home and our furniture We have lived next to construction , all the dust, debris , trash, dirt, mud,construction for 2 YEARS!!!!

Never once in a million years would I have EVER thought all of that could be harming us....

My kidos love to play outside , we love to be outside , we live in Hawaii, beautiful weather all the time Why not be outside

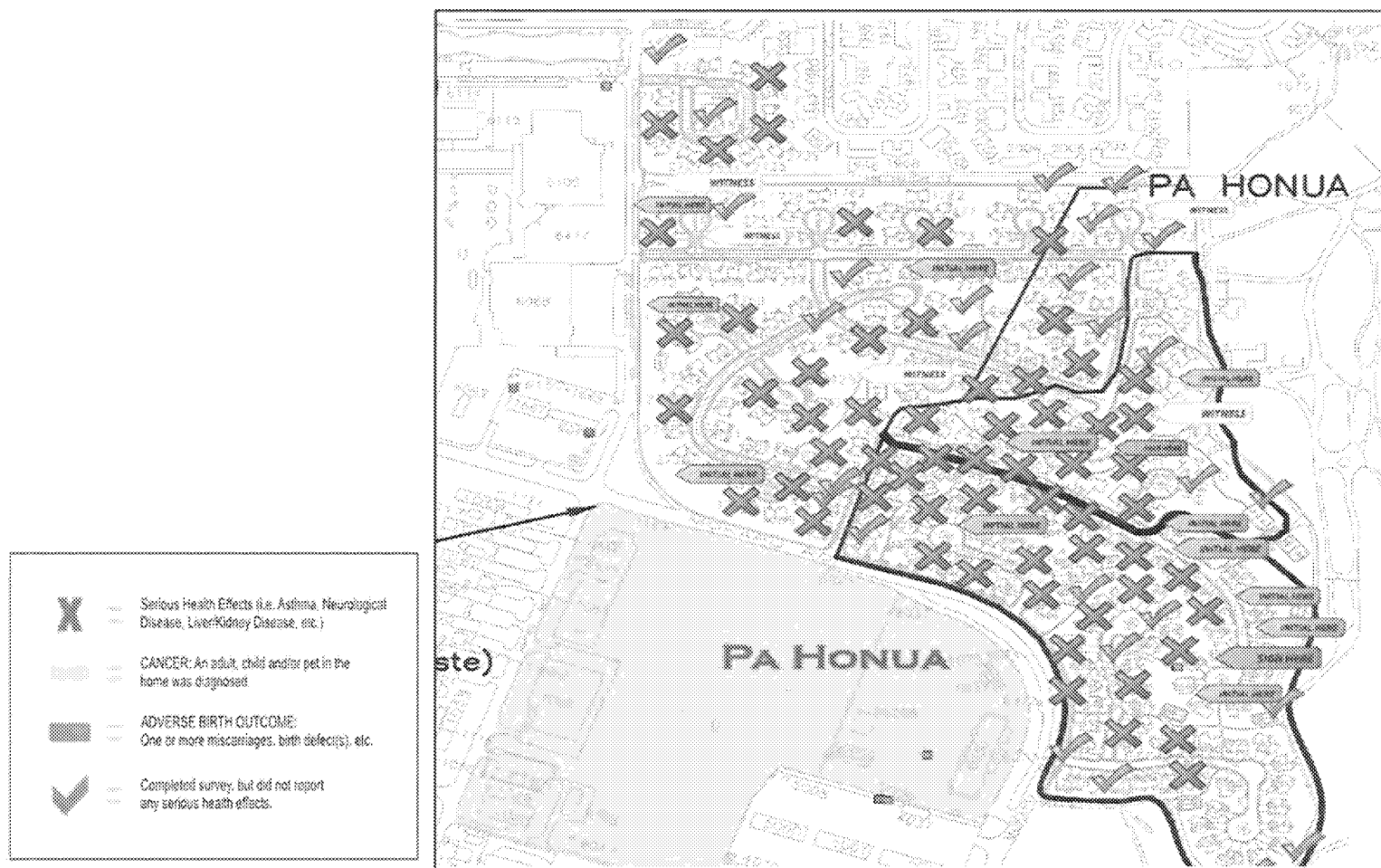
When we moved here our girls were 7 and 3..... We have enjoyed Hawaii so much but we have had lots of issues with Forest city not complying and helping when need be. Not responding to issues of concern etc.....

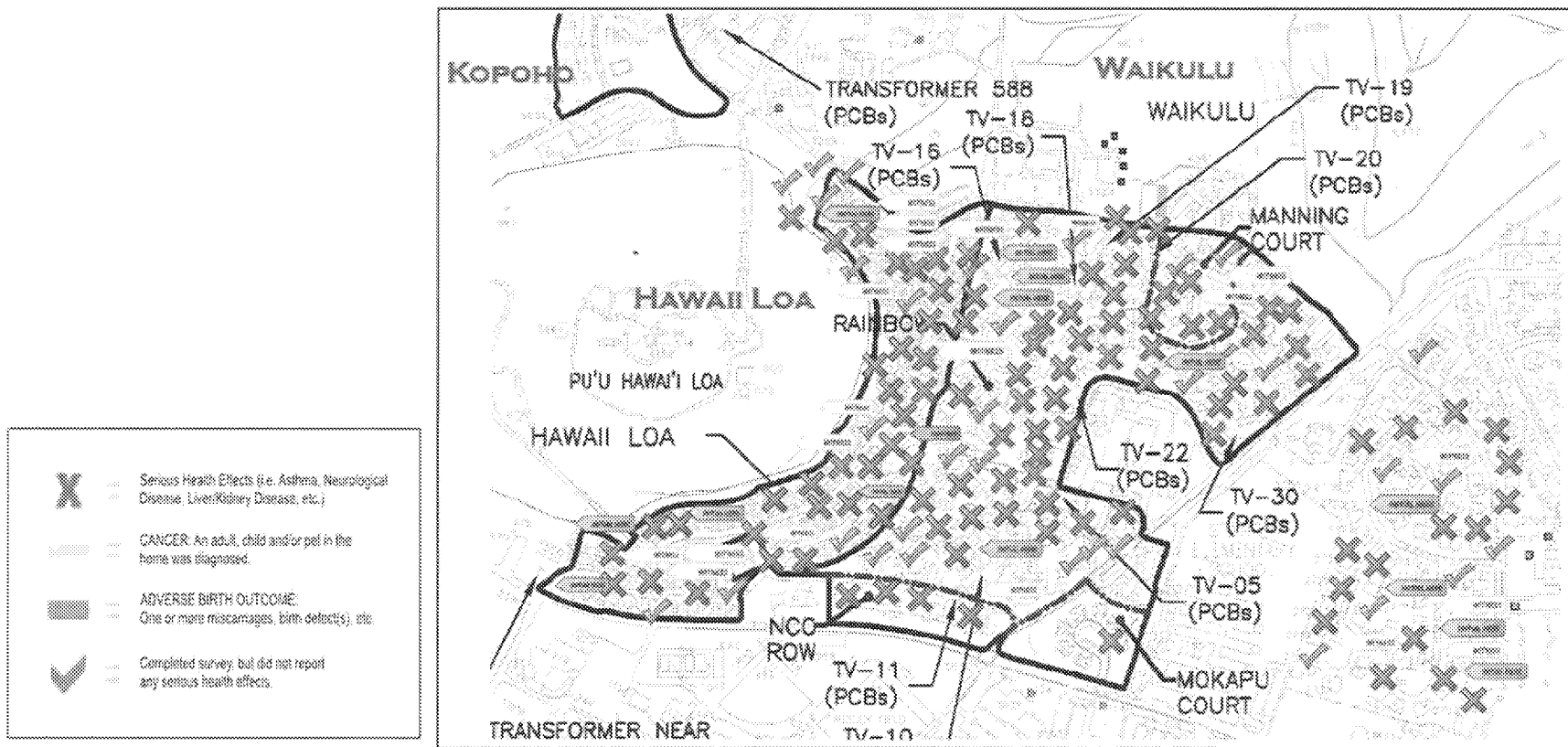
My daughter has asthma(they always say here it is the VoG) she has had a rash once or twice that they brought her to the isolation room at Kbay thinking chicken pox and they couldn't explain what it was She is now having headaches almost everyday ?!?! She is only 9..... My youngest has been doing good - she sneezes an awful lot and I don't know why but her over all health has been okay, but my concern is in the future maybe not next year but 5-10, 15-20 years what's going to happen with their health , my health , my husbands health..... With soil contamination ?!? Breathing in for 2 years that was in our cars on or cars Clothes, window sills , door frames etc.... Extra dust in our home That We were breathing , touching , planting in the backyard ?!?!

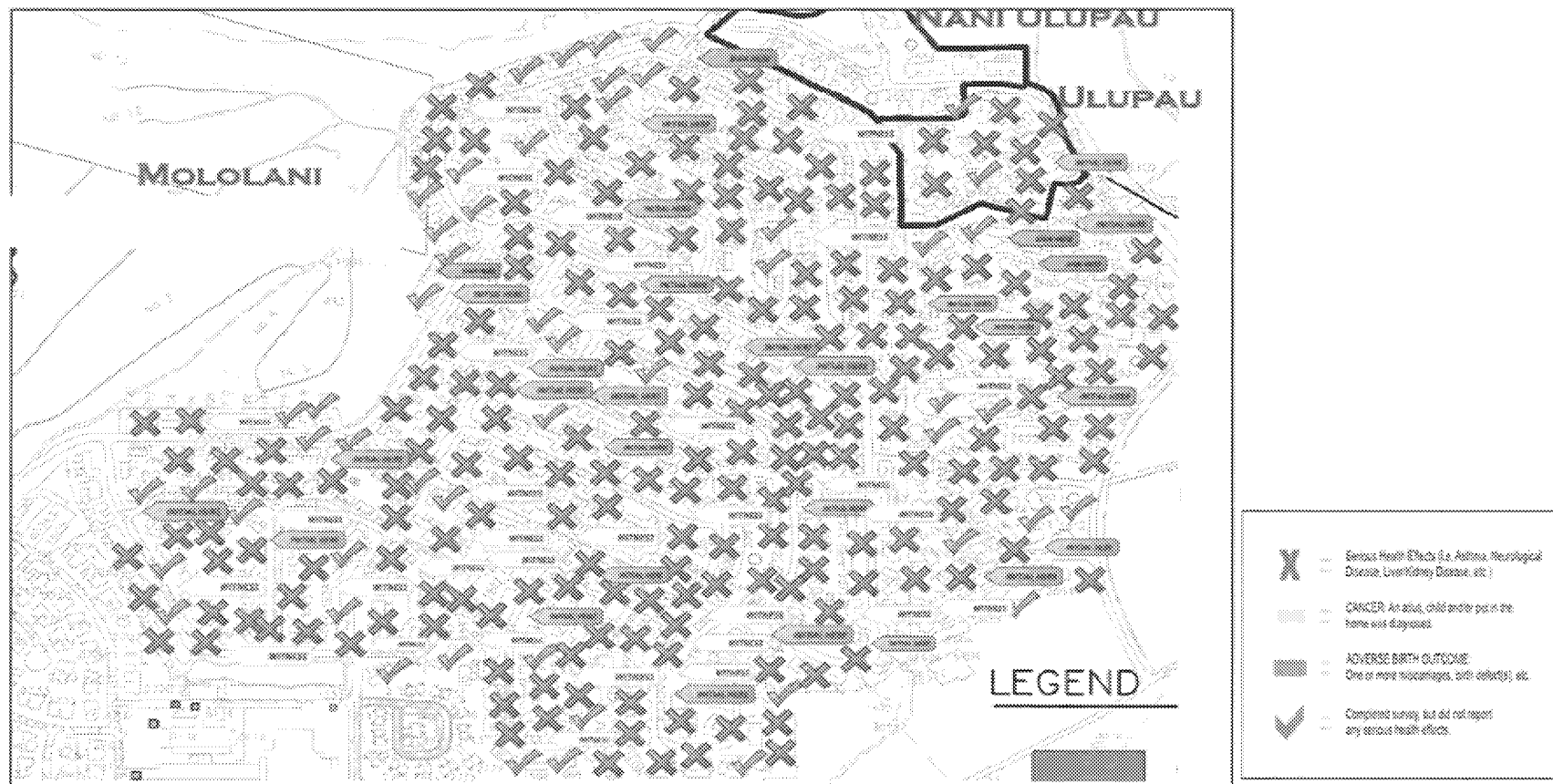
My health has had some issues.... I have aches and pains that I don't know why?! They have tested for arthritis and for lupus and nothing I work out regularly - I'm in good shape..... So why do I hurt ?!? Could this be a cause ?! What about itching all over ?!? To many concerns, to many questions, to many scares, to many unanswered questions?!?!

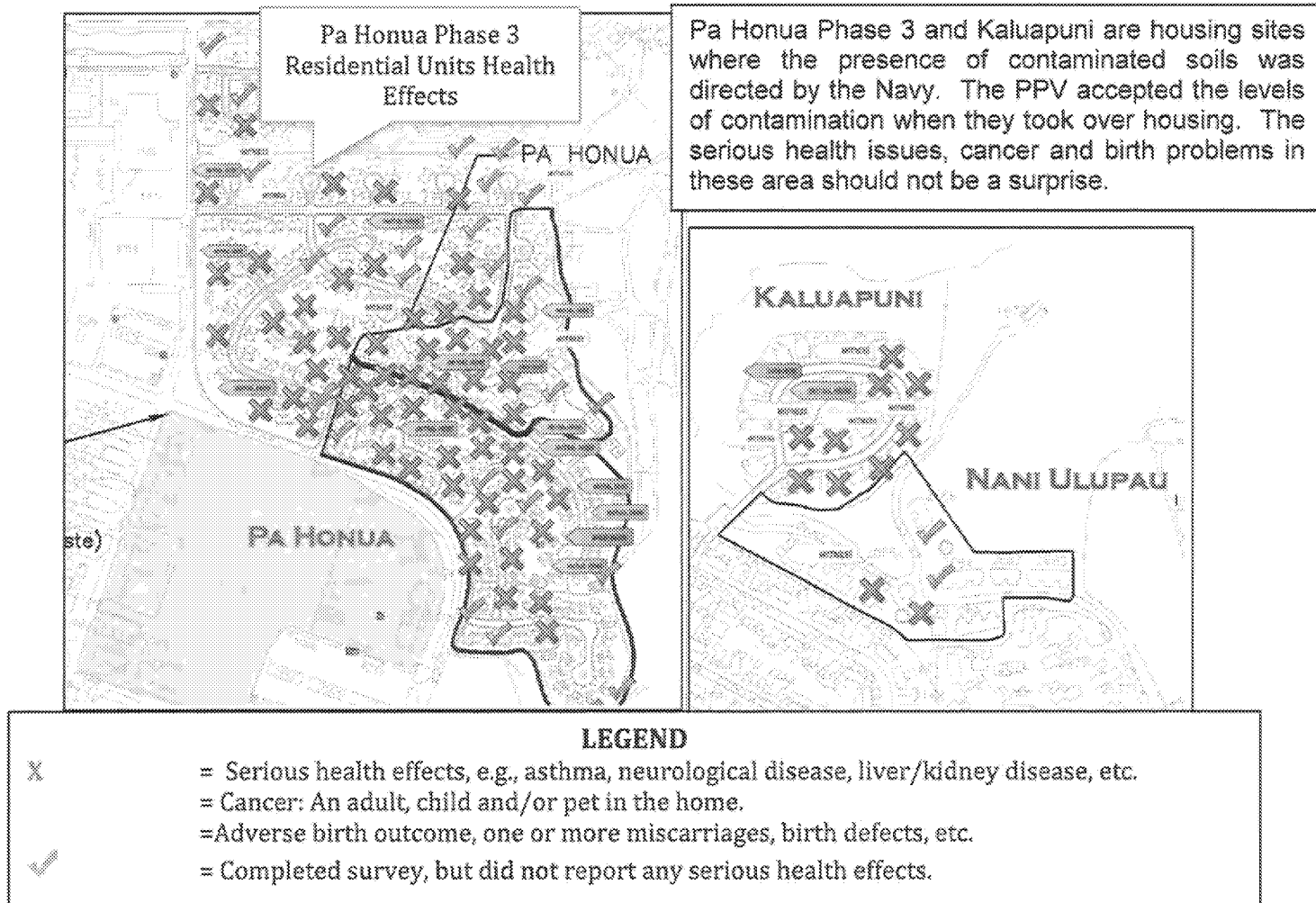
I need , I want , answers I want to be sure we will be okay ?!? So the last stage of contruction has just been finished so we have lived next to it from January 2012-February 2014!!!!!!!

My warmest regards please



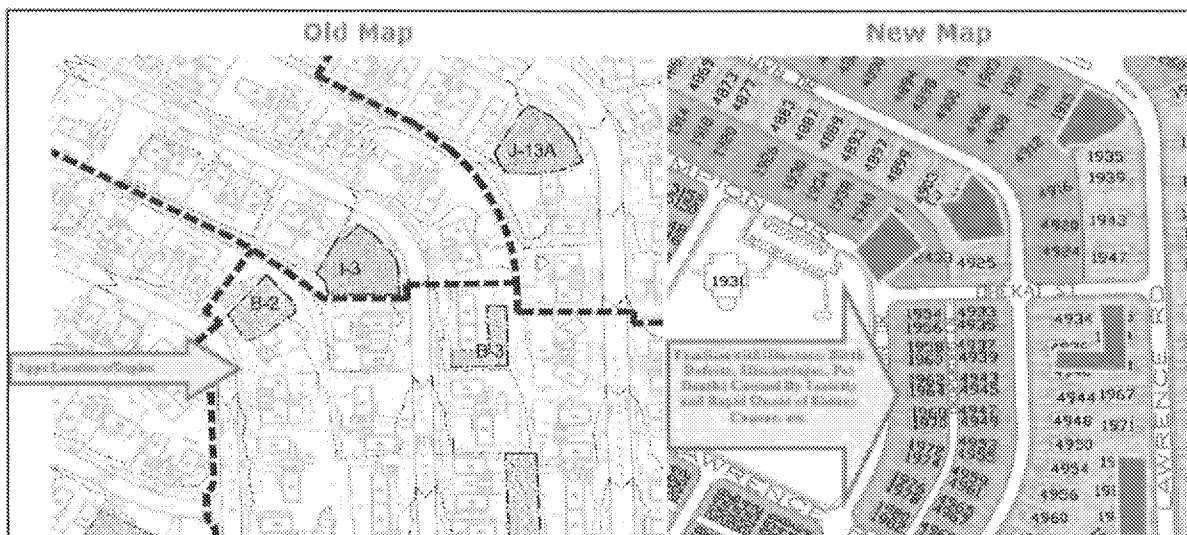






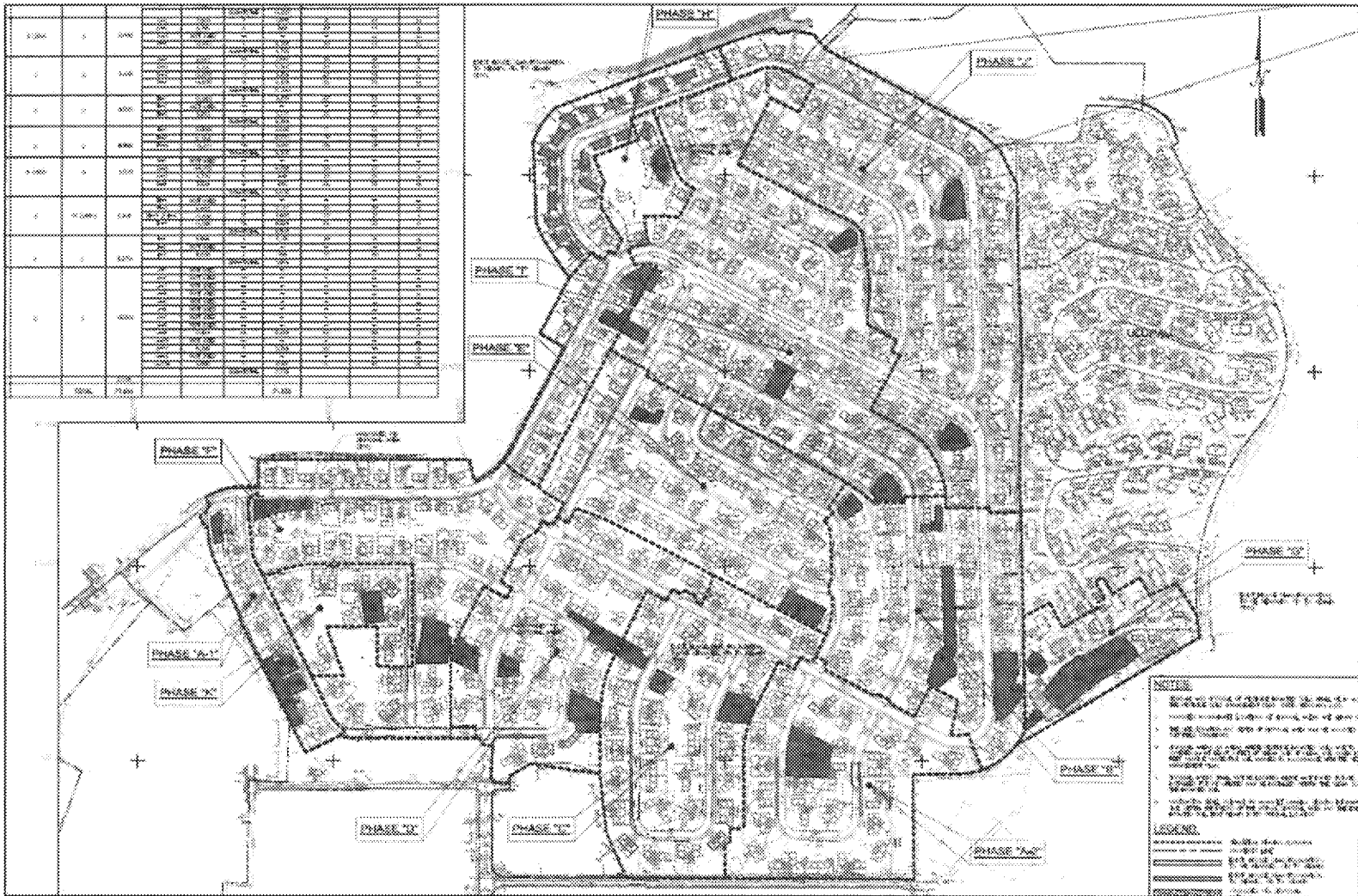
Vinny was a healthy, happy dog until we woke up one morning and found him almost lifeless on our bedroom floor. I grabbed him & the kids and ran to the vet (Feather & Fur), begging them to spare no expense to save his life. He was our "baby." But none of their tests were conclusive. They said that had any typical poison caused his symptoms, one or more of their tests would have been conclusive . . . but be/c none were conclusive, they couldn't figure it out. They asked what he could've gotten into at our home, in our yard, in our neighborhood, etc. Nothing we mentioned could've caused or contributed to these symptoms. Then I mentioned the active demo site across the street from our home and how the heavy emissions from that & other nearby project sites were causing just about everyone in our neighborhood chronic health issues. We had record levels of rainfall for at least 9 or 10 days just before this. I explained how the demo site was more elevated than our home and how that caused the rain water runoff from that site to accumulate on our side of the street and even puddle in our yard. When I mentioned that I caught Vinny drinking from one of those puddles the night before, our vet said that must've been the culprit. The runoff water must've been very contaminated and the buildup of toxins must've overwhelmed his body overnight, causing his systems to start shutting down. I'm not sure why he never said it was "poisoning," but after learning about the puddle, our vet always referred to it as "toxicity" or "toxic overload."

Living in the residences that were located next to the burial pits where the contaminated soils were handled and buried clearly demonstrate the hazards associated with the contaminated soils.



Attachment H

Overall Map of Burial Pits in the Neighborhoods



EXCERPTS FROM THE COMPREHENSIVE
ENVIRONMENTAL RESPONSE, COMPENSATION, AND
LIABILITY ACT OF 1980

Discussion: The demolition, excavation and grading of the lands was required to remove the older housing. The use of hazardous substances, e.g., pesticides was applied over the years before these products were banned. It is often referred to being "legally applied". Once the demolition, excavation and grading occurs the hazardous substances that are in the soils are released to the air, grounds and surfaces resulting in exposure to humans.

The actions taken at KMBH including the use and spreading of soils with hazardous substances must be brought to the attention of the residents, new residents, authorities responsible for the protection of human health and the environment and the lawmakers. The occurrences at KMBH include the handling of soils contaminated with hazardous substances:

- to be used in and around the residences;
- to be buried under and near new housing;
- to be released during the demolition, construction, grading and burial of contaminated soils creating exposures to humans; and
- the failure to determine the effects to human health prior to, during and after such activities.

The definitions of the terms help to identify the violation of laws that occurred at KMBH when the soils contaminated with hazardous substances were released. The removal and remedy actions further created exposures and impacted human health and the environment.

Title I – Hazardous Substances Releases, Liability, Compensation Definitions.

Section 101:

(14) "The term "hazardous substance" means (A) any sub-stance designated pursuant to section 311(b)(2)(A) of the Federal Water Pollution Control Act, (B) any element, compound, mixture, solution, or substance designated pursuant to section 102 of this Act, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (but not including any waste the regulation of which under the Solid Waste Disposal Act has been suspended by Act of Congress), (D) any toxic pollutant listed under section 307(a) of the Federal Water Pollution Control Act, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act, and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to section 7 of the Toxic Substances Control Act. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

(33) "The term "pollutant or contaminant" shall include, but not be limited to, any element, substance, compound, or mixture, including disease-causing agents, which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring; except that the term "pollutant or contaminant" shall not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of paragraph (14) and shall not include natural gas, liquefied natural gas, or synthetic gas of pipeline quality (or mixtures of natural gas and such synthetic gas)."

(23) "The terms "remove" or "removal" means the cleanup or removal of released hazardous substances from the environment, such actions as may be necessary taken in the event of the threat of release of hazardous substances into the environment, such actions as may be necessary to monitor, assess, and evaluate the release or threat of release of hazardous substances, the disposal of removed material, or the taking of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare or to the environment, which may otherwise result from a release or threat of release. The term includes, in addition, without being limited to, security fencing or other measures to limit access, provision of alternative water supplies, temporary evacuation and housing of threatened individuals not otherwise provided for, action taken under section 104(b) of this Act, and any emergency assistance which may be provided under the Disaster Relief and Emergency Assistance Act."

(24) "The terms "remedy" or "remedial action" means those actions consistent with permanent remedy taken instead of or in addition to removal actions in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment. The term includes, but is not limited to, such actions at the location of the release as storage, confinement, perimeter protection using dikes, trenches, or ditches, clay cover, neutralization, cleanup of released hazardous substances and associated contaminated materials, recycling or reuse, diversion, destruction, segregation of reactive wastes, dredging or excavations, repair or replacement of leaking containers, collection of leachate and runoff, onsite treatment or incineration, provision of alternative water supplies, and any monitoring reasonably required to assure that such actions protect the public health and welfare and the environment. The term includes the costs of permanent relocation of residents and businesses and community facilities where the President determines that, alone or in combination with other measures, such relocation is more cost-effective than and

environmentally preferable to the transportation, storage, treatment, destruction, or secure disposition offsite of hazardous substances, or may otherwise be necessary to protect the public health or welfare; the term includes offsite transport and offsite storage, treatment, destruction, or secure disposition of hazardous substances and associated contaminated materials."

Attachment J DOROTHY [REDACTED] EMAIL

From: "Dorothy [REDACTED]"
To: <oshman@hawaii.rr.com>
Sent: 2006-06-27 05:56
Subject: exposure to chlordane

Dear Mr. Chun

I read your report how the military are building homes on dangerous ground. I have a story to tell you about my family and DDT that was used during the time my husband was stationed at Kaneohe in 1948 through 1950. the military furnished housing at Kaneohe, the housing was called termite village. During these two years the military sprayed the base daily with DDT, they also had a mechanical device that was hitched to a jeep to spray with, in addition to spraying the island the housing unit issued DDT can sprays for the families to use inside the apartments to kill the cockroaches.

Is this the same area that the military approved the ground is safe for military families to live? My entire family including myself developed tumors and cancer, I had two children, I lost one with cancer, years later I lost my husband from toxic exposure, mercury and DDT combined. colon cancer, severe nerve damage. If I can be of any help to prevent the building of these homes, please advise.

I know the pain and suffering of toxic exposure. It may take years to effect the body.

Sincerely,

Dorothy [REDACTED]

